FILE 'HOME' ENTERED AT 15:55:01 ON 03 MAR 2010

=> FILE REG

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.22 0.22

FULL ESTIMATED COST

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Property values tagged with IC are from the  ${\tt ZIC/VINITI}$  data file provided by InfoChem.

STRUCTURE FILE UPDATES: 2 MAR 2010 HIGHEST RN 1207712-05-7 DICTIONARY FILE UPDATES: 2 MAR 2010 HIGHEST RN 1207712-05-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when conducting  ${\tt SmartSELECT}$  searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S TRIAZINE AND ETHENYL AND TRICHLORO

252714 TRIAZINE

933785 ETHENYL

284738 TRICHLORO

L1 246 TRIAZINE AND ETHENYL AND TRICHLORO

=> S L1 AND ETHOXY

2879810 ETHOXY

L2 12 L1 AND ETHOXY

=> D 12

L2 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2010 ACS on STN

RN 97802-78-3 REGISTRY

ED Entered STN: 31 Aug 1985

CN 1,3,5-Triazine, 2-[4-[2-(4-ethoxyphenyl)ethenyl]phenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

MF C21 H15 C16 N3 O

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> S L1 AND DIETHOXY 147438 DIETHOXY

L3 2 L1 AND DIETHOXY

=> D 1-2

L3 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2010 ACS on STN

RN 229326-43-6 REGISTRY

ED Entered STN: 29 Jul 1999

CN 1,3,5-Triazine, 2-[2-(2,4-diethoxyphenyl)ethenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

MF C17 H15 C16 N3 O2

SR CA

LC STN Files: CA, CAPLUS

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2010 ACS on STN RN 209530-49-4 REGISTRY

ED Entered STN: 06 Aug 1998

CN 1,3,5-Triazine, 2-[2-(3,5-diethoxyphenyl)ethenyl]-4,6-

bis(trichloromethyl) - (CA INDEX NAME)

MF C17 H15 C16 N3 O2

SR CA

LC STN Files: CA, CAPLUS

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> S L1 AND DI AND OXY

25835905 DI

16245265 OXY

L4 24 L1 AND DI AND OXY

=> D 1-24

L4 ANSWER 1 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 1138830-85-9 REGISTRY

ED Entered STN: 26 Apr 2009

CN 1,3,5-Triazine-2,4-diamine, N2-[1-(3-methoxyphenyl)ethyl]-6-(1,2,2-trichloroethenyl)- (CA INDEX NAME)

MF C14 H14 C13 N5 O

SR CA

LC STN Files: CA, CAPLUS

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 2 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 1138830-67-7 REGISTRY

ED Entered STN: 26 Apr 2009

1,3,5-Triazine-2,4-diamine, N2-[1-[(3-methylphenoxy)methyl]propyl]-6(1,2,2-trichloroethenyl)- (CA INDEX NAME)

MF C16 H18 C13 N5 O

SR CA

LC STN Files: CA, CAPLUS

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 3 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 1138830-57-5 REGISTRY

ED Entered STN: 26 Apr 2009

CN 1,3,5-Triazine-2,4-diamine, N2-[1-methyl-2-(3-methylphenoxy)ethyl]-6-(1,2,2-trichloroethenyl)- (CA INDEX NAME)

MF C15 H16 C13 N5 O

SR CA

LC STN Files: CA, CAPLUS

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 4 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 504396-10-5 REGISTRY \*

 $^{\star}$  Use of this CAS Registry Number alone as a search term in other STN files may

result in incomplete search results. For additional information, enter HELP  $RN^*$  at an online arrow prompt (=>).

ED Entered STN: 24 Apr 2003

CN 2,7-Naphthalenedisulfonic acid,

5-amino-3-[[4-(ethenylsulfonyl)phenyl]azo]-4-hydroxy-, disodium salt, reaction products with

7-amino-4-hydroxy-3-[(4-methoxy-2-sulfophenyl)azo]-

2-naphthalenesulfonic acid disodium salt, propylenediamine,

2,4,6-trichloro-1,3,5-triazine and 2,4,6-trifluoro-1,3,5-triazine (CA INDEX NAME)

MF Unspecified

CI MAN, GRS

SR CAS Client Services

LC STN Files: CHEMLIST

#### \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L4 ANSWER 5 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 229326-45-8 REGISTRY

ED Entered STN: 29 Jul 1999

CN 1,3,5-Triazine, 2-[2-(2,4-dibutoxyphenyl)ethenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

MF C21 H23 C16 N3 O2

SR CA

LC STN Files: CA, CAPLUS

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 6 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN RN 229326-44-7 REGISTRY

ED Entered STN: 29 Jul 1999

CN 1,3,5-Triazine, 2-[2-(2,4-dipropoxyphenyl)ethenyl]-4,6-

bis(trichloromethyl) - (CA INDEX NAME)

MF C19 H19 C16 N3 O2

SR CA

LC STN Files: CA, CAPLUS

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 7 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 229326-43-6 REGISTRY

ED Entered STN: 29 Jul 1999

CN 1,3,5-Triazine, 2-[2-(2,4-diethoxyphenyl)ethenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

MF C17 H15 C16 N3 O2

SR CA

LC STN Files: CA, CAPLUS

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 8 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN RN 212955-92-5 REGISTRY

Entered STN: 21 Oct 1998 EDBenzenediazonium, 4-(phenylamino)-, sulfate (2:1), polymer with formaldehyde and 2-[2-(4-methoxyphenyl)ethenyl]-4,6-bis(trichloromethyl)-1,3,5-triazine (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: 1,3,5-Triazine, 2-[2-(4-methoxyphenyl)] ethenyl]-4,6bis(trichloromethyl)-, polymer with formaldehyde and (4-phenylamino) benzenediazonium sulfate (2:1) (9CI) CN Formaldehyde, polymer with 2-[2-(4-methoxyphenyl)ethenyl]-4,6bis(trichloromethyl)-1,3,5-triazine and 4-(phenylamino)benzenediazonium sulfate (2:1) (9CI) (C14 H9 C16 N3 O . C12 H10 N3 . C H2 O . 1/2 O4 S)x MFCI PCT Polyether, Polyether formed, Polyother, Polystyrene, Polyvinyl SR LC STN Files: CA, CAPLUS CM1 CRN 42573-57-9 CMF C14 H9 C16 N3 O CCl3 2 CM CRN 50-00-0 CMF C H2 O  $H_2C = 0$ СМ 3 CRN 150-33-4 C12 H10 N3 . 1/2 O4 S CMF CM 4 CRN 16072-57-4 CMF C12 H10 N3

CM 5

CRN 14808-79-8 CMF 04 S

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 9 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 209530-49-4 REGISTRY

ED Entered STN: 06 Aug 1998

CN 1,3,5-Triazine, 2-[2-(3,5-diethoxyphenyl)ethenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

MF C17 H15 C16 N3 O2

SR CA

LC STN Files: CA, CAPLUS

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 10 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN RN 180308-17-2 REGISTRY

ED Entered STN: 29 Aug 1996

CN 1,3,5-Triazine, 2-[2-(2,5-dimethoxyphenyl)ethenyl]-4,6-

bis(trichloromethyl) - (CA INDEX NAME)

MF C15 H11 C16 N3 O2

SR CA

LC STN Files: CA, CAPLUS

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 11 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 167996-75-0 REGISTRY

ED Entered STN: 22 Sep 1995

CN 1,3,5-Triazine, 2-[2-(2,3-dimethoxyphenyl)ethenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

AE C15 H11 C16 N2 O2

MF C15 H11 C16 N3 O2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)

4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

 ${\tt L4}$   $\,$  ANSWER 12 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN  $\,$ 

RN 165954-20-1 REGISTRY

ED Entered STN: 09 Aug 1995

CN 1,3,5-Triazine, 2-(2,2-dimethylpropyl)-4-[2-(4-methoxyphenyl)ethenyl]-6-(trichloromethyl)- (CA INDEX NAME)

MF C18 H20 C13 N3 O

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 13 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 165954-13-2 REGISTRY

ED Entered STN: 09 Aug 1995

CN 1,3,5-Triazine, 2-(1,1-dimethylethyl)-4-[2-(4-methoxyphenyl)ethenyl]-6-(trichloromethyl)- (CA INDEX NAME)

MF C17 H18 C13 N3 O

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 14 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 154880-07-6 REGISTRY

ED Entered STN: 06 May 1994

CN 1,3,5-Triazine, 2-[2-(3,5-dimethoxyphenyl)ethenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

### OTHER NAMES:

CN 2,4-Bis(trichloromethyl)-6-[2-(3,5-dimethoxyphenyl)ethenyl]-s-triazine

MF C15 H11 C16 N3 O2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

6 REFERENCES IN FILE CA (1907 TO DATE)

6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 15 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 148515-39-3 REGISTRY

ED Entered STN: 07 Jul 1993

CN Carbamic acid, [(2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-6,1-hexanediyl]tris-, tris[2-[3-[2-[4,6-bis(trichloromethyl)-1,3,5-triazin-2-yl]ethenyl]phenoxy]ethyl] ester (9CI) (CA INDEX NAME)

MF C69 H69 C118 N15 O12

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-A

PAGE 2-A

PAGE 2-B

PAGE 2-C

- CCl3

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 16 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 133926-84-8 REGISTRY

ED Entered STN: 24 May 1991

CN 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-[4-(2-phenylethenyl)phenyl]-4,6-bis(trichloromethyl)-1,3,5-triazine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3,5-Triazine, 2-[4-(2-phenylethenyl)phenyl]-4,6bis(trichloromethyl)-, polymer with
2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate
(9CI)

MF (C19 H11 C16 N3 . C15 H20 O6)x

CI PMS

PCT Polyacrylic, Polystyrene

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 97802-84-1 CMF C19 H11 C16 N3

CM 2

CRN 15625-89-5 CMF C15 H20 O6

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 17 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 125775-93-1 REGISTRY

ED Entered STN: 09 Mar 1990

CN 1,3,5-Triazine, 2-[4-[2-[5-(3,4-dimethoxyphenyl)-1,3,4-oxadiazol-2-yl]ethenyl]phenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

MF C23 H15 C16 N5 O3

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 18 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 125775-91-9 REGISTRY

ED Entered STN: 09 Mar 1990

CN 1,3,5-Triazine, 2-[3-[5-[2-(3,4-dimethoxyphenyl)ethenyl]-1,3,4-oxadiazol-2-yl]phenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

MF C23 H15 C16 N5 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 19 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 125775-86-2 REGISTRY

ED Entered STN: 09 Mar 1990

CN 1,3,5-Triazine, 2-[4-[5-[2-(3,4-dimethoxyphenyl)ethenyl]-1,3,4-oxadiazol-2-yl]phenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

MF C23 H15 C16 N5 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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2 REFERENCES IN FILE CA (1907 TO DATE)
               2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
L4
    ANSWER 20 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN
RN
    116746-99-7 REGISTRY
ΕD
    Entered STN: 02 Oct 1988
CN
     2-Propenoic acid, polymer with 1-ethenyl-2-pyrrolidinone,
     1,6-hexanediyl di-2-propenoate, isooctyl 2-propenoate and
     2-(4-methoxy-1-naphthalenyl)-4,6-bis(trichloromethyl)-1,3,5-triazine
     (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    1,3,5-Triazine, 2-(4-methoxy-1-naphthalenyl)-4,6-bis(trichloromethyl)-
     , polymer with 1-ethenyl-2-pyrrolidinone, 1,6-hexanediyl di-2-propenoate,
     isooctyl 2-propenoate and 2-propenoic acid (9CI)
CN
     2-Propenoic acid, 1,6-hexanediyl ester, polymer with
     1-ethenyl-2-pyrrolidinone, isooctyl 2-propenoate,
     2-(4-methoxy-1-naphthalenyl)-4,6-bis(trichloromethyl)-1,3,5-triazine and
     2-propenoic acid (9CI)
CN
     2-Propenoic acid, isooctyl ester, polymer with
     1-ethenyl-2-pyrrolidinone, 1,6-hexanediyl di-2-propenoate,
     2-(4-methoxy-1-naphthalenyl)-4,6-bis(trichloromethyl)-1,3,5-triazine and
     2-propenoic acid (9CI)
CN
     2-Pyrrolidinone, 1-ethenyl-, polymer with 1,6-hexanediyl
     di-2-propenoate, isooctyl 2-propenoate,
     2-(4-methoxy-1-naphthalenyl)-4,6-bis(trichloromethyl)-1,3,5-triazine and
     2-propenoic acid (9CI)
     (C16 H9 C16 N3 O . C12 H18 O4 . C11 H2O O2 . C6 H9 N O . C3 H4 O2)x
MF
CI
     PMS
PCT Polyacrylic, Polyother, Polyvinyl
SR
     STN Files: CA, CAPLUS, USPATFULL
LC
     CM
          1
     CRN 69432-40-2
     CMF C16 H9 C16 N3 O
```

OMe

CM 2

CRN 29590-42-9 CMF C11 H20 O2

CCI IDS

$$\begin{array}{c} & \circ \\ \parallel \\ \text{(iso-C8H}_{17}\text{)} - \circ - \circ - \circ - \circ \text{CH} = \circ \text{CH}_2 \end{array}$$

CM 3

CRN 13048-33-4 CMF C12 H18 O4

CM 4

CRN 88-12-0 CMF C6 H9 N O

CM 5

CRN 79-10-7 CMF C3 H4 O2

# 1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4ANSWER 21 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

113804-30-1 REGISTRY RN

ED Entered STN: 09 Apr 1988

2-Propenoic acid, isooctyl ester, polymer with 2-(3,4-dimethoxyphenyl)-4,6-bis(trichloromethyl)-1,3,5-triazine, 1-ethenyl-2-pyrrolidinone and 2-propenamide (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

1,3,5-Triazine, 2-(3,4-dimethoxyphenyl)-4,6-bis(trichloromethyl)-, polymer with 1-ethenyl-2-pyrrolidinone, isooctyl 2-propenoate and 2-propenamide (9CI)

CN 2-Propenamide, polymer with 2-(3,4-dimethoxyphenyl)-4,6bis(trichloromethyl)-1,3,5-triazine, 1-ethenyl-2-pyrrolidinone and isooctyl 2-propenoate (9CI)

CN 2-Pyrrolidinone, 1-ethenyl-, polymer with 2-(3,4-dimethoxyphenyl)-4,6-bis(trichloromethyl)-1,3,5-triazine, isooctyl 2-propenoate and 2-propenamide (9CI) (C13 H9 C16 N3 O2 . C11 H2O O2 . C6 H9 N O . C3 H5 N O) $_{\rm X}$ 

MF

CI

PCT Polyacrylic, Polyother, Polyvinyl

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

> CM 1

CRN 80050-87-9

CMF C13 H9 C16 N3 O2

CM 2

CRN 29590-42-9 CMF C11 H20 O2

CCI IDS

CM 3

CRN 88-12-0 CMF C6 H9 N O

CM 4

CRN 79-06-1 CMF C3 H5 N O

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 22 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 97802-76-1 REGISTRY

ED Entered STN: 31 Aug 1985

CN 1,3,5-Triazine, 2-[4-[2-(3,4-dimethoxyphenyl)ethenyl]phenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

MF C21 H15 C16 N3 O2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

# 1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 23 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 42880-08-0 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1,3,5-Triazine, 2-[2-(2,4-dimethoxyphenyl)ethenyl]-4,6-bis(trichloromethyl)- (CA INDEX NAME)

OTHER NAMES:

CN 2-(2,4-Dimethoxystyryl)-4,6-bis(trichloromethyl)-s-triazine

CN TAZ 114

MF C15 H11 C16 N3 O2

LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, IFICDB, IFIPAT, IFIUDB, SPECINFO, USPATFULL

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

15 REFERENCES IN FILE CA (1907 TO DATE)

15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 24 OF 24 REGISTRY COPYRIGHT 2010 ACS on STN

RN 42880-07-9 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1,3,5-Triazine, 2-[2-(3,4-dimethoxyphenyl)ethenyl]-4,6bis(trichloromethyl)- (CA INDEX NAME)

OTHER NAMES:

CN 2-(3,4-Dimethoxystyry1)-4,6-bis(trichloromethy1)-s-triazine

CN TAZ 113

MF C15 H11 C16 N3 O2

LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, IFICDB, IFIPAT, IFIUDB, SPECINFO, USPATFULL

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

18 REFERENCES IN FILE CA (1907 TO DATE) 18 REFERENCES IN FILE CAPLUS (1907 TO DATE)

 $\Rightarrow$  S 42880-07-9

1 42880-07-9 (42880-07-9/RN)

=> D

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2010 ACS on STN

42880-07-9 REGISTRY RN

Entered STN: 16 Nov 1984 ED

1,3,5-Triazine, 2-[2-(3,4-dimethoxyphenyl)ethenyl]-4,6-CN bis(trichloromethyl) - (CA INDEX NAME)

OTHER NAMES:

2-(3,4-Dimethoxystyryl)-4,6-bis(trichloromethyl)-s-triazine CN

CN TAZ 113

MFC15 H11 C16 N3 O2

LC CA, CAPLUS, CHEMCATS, CSCHEM, IFICDB, IFIPAT, IFIUDB, STN Files: SPECINFO, USPATFULL

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

18 REFERENCES IN FILE CA (1907 TO DATE)

18 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FILE CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL SESSION ENTRY 100.46

100.24

FULL ESTIMATED COST

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FILE COVERS 1907 - 3 Mar 2010 VOL 152 ISS 10

FILE LAST UPDATED: 2 Mar 2010 (20100302/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L5

L6 18 L5

=> D ALL 1-18

- L6 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2007:1272565 CAPLUS <<LOGINID::20100303>>
- DN 147:531561
- ED Entered STN: 09 Nov 2007
- TI Optical compensation sheet having liquid crystals with hybrid alignment and fluoropolymers, polarizer using it, and liquid crystal display having it with wide view angle
- IN Tatsuta, Takekazu; Ushiyama, Akinobu; Kondo, Shunichi; Morishima,
- PA Fuji Photo Film Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 61pp.

CODEN: JKXXAF

- DT Patent
- LA Japanese
- CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 JP 2007293180 JP 2006-123308	A	20071108 20060427	JP 2006-123308	20060427

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

IPCI

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[I,A]; G02F0001-13 [I,C*]
                 IPCR
                        G02B0005-30 [I,C]; G02B0005-30 [I,A]; G02F0001-13
                        [I,C]; G02F0001-1335 [I,A]; G02F0001-13363 [I,A]
                 FTERM 2H049/BA02; 2H049/BA06; 2H049/BA42; 2H049/BB03;
                        2H049/BB49; 2H049/BC02; 2H049/BC22; 2H091/FA08X;
                        2H091/FA08Z; 2H091/FA11X; 2H091/FA11Z; 2H091/FA12X;
                        2H091/FA12Z; 2H091/FB02; 2H091/FD06; 2H091/KA02;
                        2H091/LA12
    The optical compensation sheet comprises (A) a substrate, (B) an
alignment
     layer formed from a 1st composition, and (C) an optical compensation
layer
     formed from a 2nd composition comprising liquid crystalline compds.,
photopolymn.
     initiators with a sensitive range of 330-450 nm generating halogen
     radicals or hydrocarbon radicals that comprise \leq 8 atoms (except H),
     and fluoroaliph. group-containing polymers having hydrophilic groups
selected
     from CO2H, SO3H, PO(OH)2, and their salts, wherein the 1st composition
and/or
     the 2nd composition contain ≥1 crystal nucleating agents with
     nucleophilic constant 5-10. Optical compensation sheets with highly
     controlled alignment angles and high alignment rate of the liquid
crystalline
    compds. are provided with this invention.
     optical compensation sheet hybrid alignment fluoropolymer; LCD
compensator
     lig crystal alignment fixing fluoropolymer photoinitiator; nucleating
     agent hydrophilic fluoropolymer optical compensator LCD display
ΙT
     Fluoropolymers, uses
     RL: POF (Polymer in formulation); TEM (Technical or engineered material
     use); USES (Uses)
        (acrylic; optical compensation sheet having liquid crystals with
hybrid
        alignment and fluoropolymers)
ΙT
     Sulfites
     Thiosulfates
     RL: MOA (Modifier or additive use); USES (Uses)
        (nucleating agent; optical compensation sheet having liquid crystals
wit.h
        hybrid alignment and fluoropolymers)
ΤТ
    Crystal nucleating agents
     Liquid crystal displays
     Polarizers
        (optical compensation sheet having liquid crystals with hybrid
alignment
        and fluoropolymers)
ΤT
     Polymerization catalysts
        (photopolymn.; optical compensation sheet having liquid crystals with
        hybrid alignment and fluoropolymers)
ΤТ
     Optical instruments
        (retarders; optical compensation sheet having liquid crystals with
hybrid
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G02B0005-30 [I,A]; G02F0001-13363 [I,A]; G02F0001-1335

```
alignment and fluoropolymers)
ΙT
     182154-38-7
     RL: TEM (Technical or engineered material use); USES (Uses)
        (alignment layer containing; optical compensation sheet having liquid
        crystals with hybrid alignment and fluoropolymers)
ΙT
     902515-39-3 910810-39-8
                                927889-28-9
     RL: POF (Polymer in formulation); TEM (Technical or engineered material
     use); USES (Uses)
        (anisotropic layer containing; optical compensation sheet having
liquid
        crystals with hybrid alignment and fluoropolymers)
ΙT
     9004-36-8, CAB 551-0.2
     RL: TEM (Technical or engineered material use); USES (Uses)
        (anisotropic layer containing; optical compensation sheet having
liquid
        crystals with hybrid alignment and fluoropolymers)
ΙT
     1310-58-3, Potassium hydroxide, uses 7757-82-6, Disodium sulfate, uses
     14280-30-9, Hydroxide, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (nucleating agent; optical compensation sheet having liquid crystals
with
        hybrid alignment and fluoropolymers)
     401624-10-0P
TΤ
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (optical compensation sheet having liquid crystals with hybrid
alignment
        and fluoropolymers)
     876594-22-8
ΤТ
     RL: MOA (Modifier or additive use); USES (Uses)
        (optical compensation sheet having liquid crystals with hybrid
alignment
       and fluoropolymers)
     91-44-1 27389-48-6 42880-07-9 71255-78-2 76185-67-6
ΤТ
     91484-47-8 97802-84-1 125407-19-4 125675-34-5 145413-29-2
    154880-05-4
                 156360-76-8 195834-08-3
                                             253585-66-9
                                                           253585-71-6
    359776-76-4
                  381233-66-5
                               405263-63-0 932020-63-8
                                                            932020-64-9
                                              932020-68-3
     932020-65-0
                  932020-66-1
                                932020-67-2
    RL: CAT (Catalyst use); USES (Uses)
        (photopolymn. initiator; optical compensation sheet having liquid
        crystals with hybrid alignment and fluoropolymers)
     9012-09-3, TD 80U
ΤТ
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polarizer substrate; optical compensation sheet having liquid
crystals
        with hybrid alignment and fluoropolymers)
     9004-35-7
ΙT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (substrate; optical compensation sheet having liquid crystals with
hybrid
        alignment and fluoropolymers)
L6
     ANSWER 2 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
ΑN
     2007:971053 CAPLUS <<LOGINID::20100303>>
```

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147:311478
DN
   Entered STN: 31 Aug 2007
ED
    Optical compensation sheets having photopolymerized liquid crystal
TΙ
    anisotropic layers, their manufacture, polarizing plates, and liquid
    crystal displays
ΙN
    Oikawa, Noriki; Yoshikawa, Susumu; Kondo, Shunichi
    Fuji Photo Film Co., Ltd., Japan
    Jpn. Kokai Tokkyo Koho, 35pp.
    CODEN: JKXXAF
DT
    Patent
LA
   Japanese
CC
    74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
    Section cross-reference(s): 25, 35, 38, 73
FAN.CNT 1
    PATENT NO.
                      KIND DATE
                                        APPLICATION NO.
                                                              DATE
    _____
                      ____
                                         ______
                       A 20070830 JP 2006-40258
    JP 2007219193
                                                             20060217
PRAI JP 2006-40258
                             20060217
CLASS
              CLASS PATENT FAMILY CLASSIFICATION CODES
PATENT NO.
 _____
                      _____
               IPCI G02B0005-30 [I,A]; B32B0007-02 [I,A]; B32B0023-08
                      [I,A]; B32B0023-00 [I,C*]; G02F0001-13363 [I,A];
                      G02F0001-1335 [I,A]; G02F0001-13 [I,C*]
                IPCR
                      G02B0005-30 [I,C]; G02B0005-30 [I,A]; B32B0007-02
                      [I,C]; B32B0007-02 [I,A]; B32B0023-00 [I,C];
                      B32B0023-08 [I,A]; G02F0001-13 [I,C]; G02F0001-1335
                      [I,A]; G02F0001-13363 [I,A]
                FTERM 2H049/BA02; 2H049/BA06; 2H049/BA42; 2H049/BB03;
                      2H049/BB49; 2H049/BC02; 2H049/BC05; 2H049/BC22;
                      2H091/FA08X; 2H091/FA08Z; 2H091/FA11X; 2H091/FA11Z;
                      2H091/FB02; 2H091/FB12; 2H091/HA06; 2H091/HA07;
                      2H091/HA09; 2H091/HA10; 2H091/HA12; 2H091/KA02;
                      2H091/KA10; 2H091/LA19; 4F100/AJ06A; 4F100/AK01B;
                      4F100/AK01C; 4F100/AK21; 4F100/AK25; 4F100/AR00A;
                      4F100/BA02; 4F100/BA03; 4F100/BA10A; 4F100/BA10B;
                      4F100/BA10C; 4F100/CA30B; 4F100/EH462; 4F100/EJ083;
                      4F100/EJ542; 4F100/GB41; 4F100/JA11B; 4F100/JA20C;
                      4F100/JB14B; 4F100/JK06; 4F100/JL05B; 4F100/JN01A;
                      4F100/JN30B
    The sheets have optical retardation layers manufactured by photopolymn.
of liquid
    crystalline compns. containing ZnL100Qm [Z = polymerizable substituent;
    SiR1003, aldehyde, acyl, carboxyl, isocyanate, B-containing substituent;
R100
    = halo, alkoxy, alkyl; \geq 1 of R100 = halo or alkoxy; L100 = (m +
    n)-valent linkage; m = 1, 2; n = 0-4] and photopolymn. initiators
    generating halogen radicals or C≤8 hydrocarbon radicals by
    excitation with light at 330-450 nm. Preferable compds. for the
    initiators are also given. In the manufacture, the compns. are cured at
    \leq 80^{\circ}. The sheets have good interlayer adhesion between the
    anisotropic layers and alignment layers.
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```
optical compensation sheet anisotropic liq cryst photopolymn; LCD
ST
    polarizer photopolymerized liq crystal anisotropic
ΙT
    Liquid crystal displays
     Polarizers
        (manufacture of optical compensation sheets having photopolymd.
liquid crystal
       retardation layers for polarizing plates for liquid crystal displays)
    Optical instruments
        (retarders; manufacture of optical compensation sheets having
photopolymd.
        liquid crystal retardation layers for polarizing plates for liquid
crystal
       displays)
                                  30418-59-8, 3-Aminophenylboronic acid
     814-68-6, Acryloyl chloride
TΤ
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (acryloylaminophenylboronic acid manufactured from; manufacture of
optical
       compensation sheets having photopolymd. liquid crystal retardation
layers
        for polarizing plates for liquid crystal displays)
ΙT
     91-44-1 27389-48-6 42880-07-9 71255-78-2 76185-67-6
     91484-47-8
                 97802-84-1
                              125407-19-4
                                           125675-34-5
                                                         145413-29-2
     154880-05-4
                  156360-76-8
                                195834-08-3
                                              253585-64-7
                                                            253585-66-9
     253585-71-6
                  405263-63-0
                                932020-63-8
                                              932020-64-9
                                                            932020-65-0
     932020-66-1
                  932020-68-3
    RL: CAT (Catalyst use); USES (Uses)
        (initiator; manufacture of optical compensation sheets having
photopolymd.
        liquid crystal retardation layers for polarizing plates for liquid
crystal
       displays)
                   947279-09-6P
    947279-07-4P
                                  947279-10-9P
                                                 947279-11-0P
                                                                947279-12-1P
IT
    947279-13-2P
    RL: IMF (Industrial manufacture); TEM (Technical or engineered material
    use); PREP (Preparation); USES (Uses)
        (manufacture of optical compensation sheets having photopolymd.
liquid crystal
       retardation layers for polarizing plates for liquid crystal displays)
ΙT
     9004-35-7
    RL: TEM (Technical or engineered material use); USES (Uses)
        (support film; manufacture of optical compensation sheets having
       photopolymd. liquid crystal retardation layers for polarizing plates
for
       liquid crystal displays)
    ANSWER 3 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
L6
    ΑN
DN
     146:390896
ED
    Entered STN: 05 Apr 2007
ΤI
    Optical compensation sheet containing fixed liquid crystal, polarizer,
and
     liquid crystal display
ΙN
    Kondo, Shunichi
```

Fuji Photo Film Co., Ltd., Japan

PA

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SO
    Jpn. Kokai Tokkyo Koho, 23pp.
    CODEN: JKXXAF
DT
    Patent
LA
    Japanese
CC
    74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 1
                      KIND DATE APPLICATION NO. DATE
    PATENT NO.
    JP 2007086253
                       A 20070405 JP 2005-273162 20050921
PRAI JP 2005-273162
                              20050921
CLASS
PATENT NO.
              CLASS PATENT FAMILY CLASSIFICATION CODES
______
               IPCI G02B0005-30 [I,A]; G02F0001-1335 [I,A]; G02F0001-13363
                       [I,A]; G02F0001-13 [I,C*]; B32B0007-02 [I,A];
                       B32B0023-08 [I,A]; B32B0023-00 [I,C*]
                IPCR
                      G02B0005-30 [I,C]; G02B0005-30 [I,A]; B32B0007-02
                       [I,C]; B32B0007-02 [I,A]; B32B0023-00 [I,C];
                       B32B0023-08 [I,A]; G02F0001-13 [I,C]; G02F0001-1335
                       [I,A]; G02F0001-13363 [I,A]
                FTERM 2H049/BA02; 2H049/BA06; 2H049/BA42; 2H049/BB03;
                       2H049/BB42; 2H049/BB49; 2H049/BC04; 2H049/BC05; 2H049/BC22; 2H091/FA08X; 2H091/FA08Z; 2H091/FA11X;
                       2H091/FA11Z; 2H091/FB02; 2H091/FB12; 2H091/FC22;
                       2H091/FC23; 2H091/FD10; 2H091/FD15; 2H091/GA06;
                       2H091/GA16; 2H091/GA17; 2H091/LA12; 4F100/AJ06A;
                       4F100/AK01B; 4F100/AT00A; 4F100/BA02; 4F100/CA30B;
                       4F100/GB41; 4F100/JA11B; 4F100/JB14B; 4F100/JK06;
                       4F100/JL02; 4F100/JM01B; 4F100/JN01A; 4F100/JN10B
    The sheet comprises a transparent substrate and an optical anisotropic
AB
    layer containing liquid crystal compound fixed by a photopolymn.
initiator having
    photosensitive region at 330-450 nm and generating a hydrocarbon radical
    with number of atoms ≤8 (except halogen radical and H). Polarizer
    comprises the sheet, transparent protective layer and polarizing film.
    Liquid crystal display having the polarizers on both sides of the liquid
    crystal cell is also claimed. The sheet can be formed by low energy UV
    ray and shows good adhesion with the anisotropic layer and alignment
film.
ST
    optical compensation sheet liq crystal fixation photopolymn initiator;
liq
     crystal display polarizer optical compensator
    Liquid crystal displays
ΙT
       (liquid crystal display with optical compensation sheet with
anisotropic
       layer containing liquid crystal compound fixed by photopolymn.
    Liquid crystals, polymeric
       (optical compensation sheet with anisotropic layer containing liquid
crystal
       compound fixed by photopolymn. initiator)
    Polymerization catalysts
       (photopolymn.; optical compensation sheet with anisotropic layer
```

containing

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ΤТ
    Polarizers
        (polarizer with optical compensation sheet with anisotropic layer
        containing liquid crystal compound fixed by photopolymn. initiator)
ΙT
     Optical instruments
        (retarders; optical compensation sheet with anisotropic layer
containing
        liquid crystal compound fixed by photopolymn. initiator)
    180570-45-0P 663626-57-1P
    RL: IMF (Industrial manufacture); TEM (Technical or engineered material
    use); PREP (Preparation); USES (Uses)
        (optical compensation sheet with anisotropic layer containing liquid
crystal
       compound fixed by photopolymn. initiator)
    91-44-1 27389-48-6 42880-07-9 71255-78-2
                                                    76185-67-6
    91484-47-8 97802-84-1 125407-19-4 125675-34-5 145413-29-2
    154880-05-4
                 156360-76-8 195834-08-3
                                            253585-66-9
                                                           253585-71-6
                               932020-63-8
    359776-76-4
                  405263-63-0
                                            932020-64-9
                                                            932020-65-0
    932020-66-1
                  932020-67-2
                               932020-68-3
    RL: CAT (Catalyst use); USES (Uses)
        (photopolymn. initiator; optical compensation sheet with anisotropic
        layer containing liquid crystal compound fixed by photopolymn.
initiator)
    9004-35-7
    RL: TEM (Technical or engineered material use); USES (Uses)
        (substrate; optical compensation sheet with anisotropic layer
containing
       liquid crystal compound fixed by photopolymn. initiator)
    ANSWER 4 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
L6
    ΑN
DN
    147:223121
ED
    Entered STN: 15 Dec 2006
ΤI
    Studies of synthesis of triazine derivatives and their properties as
    photoacid generators for photoresists
ΑU
    Wang, Jian; Wang, Wen-quang; Zhang, Wei-min; Pu, Jia-ling
    Beijing Area Major Lab of Printing & Packaging Material and Technology,
CS
    Beijing Institute of Graphic, Xinghua Beilu, Beijing, 102600, Peop. Rep.
    China
SO
    Ganguang Kexue Yu Guang Huaxue (2006), 24(6), 436-443
    CODEN: GKKHE9; ISSN: 1000-3231
    Kexue Chubanshe
PB
DТ
    Journal
LA
    Chinese
    74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
CC
    Reprographic Processes)
    Five triazine derivs., such as 2-(4-methoxystyry1)-4,6-
AΒ
    bis(trichloromethyl)-1,3,5-triazine and
     2-(3,4-\text{dimethoxystyryl})-4,6-\text{bis}(\text{trichloromethyl})-1,3,5-\text{triazine}(I), were
    prepared and characterized by 1H NMR and mass spectra. Quantum yields of
    decomposition and acid formation of I in acetonitrile in different
concns. were
    measured when exposed at 405 and 365 nm. It was found that quantum
yields
```

liquid crystal compound fixed by photopolymn. initiator)

```
are strongly dependent on the wavelengths of light, rather than on their
    concns. in acetonitrile. Decomposition and acid formation in
acetonitrile of I
    are more efficient at 405 nm than at 365 nm.
ST
    styryl triazine compd photoacid generator photoresist
ΙT
    Photoresists
       (preparation of triazine derivs. as photoacid generators for
photoresists)
    42573-57-9P
                  42880-07-9P 123319-90-4P 944727-17-7P
    944727-18-8P
    RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
       (preparation of triazine derivs. as photoacid generators for
photoresists)
    120-14-9
              120-21-8 123-11-5, reactions 949-42-8 4181-05-9
ΙT
     7570-45-8
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of triazine derivs. as photoacid generators for
photoresists)
    ANSWER 5 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
L6
AN
    DN
    145:113605
   Entered STN: 07 Jul 2006
    Radiation-sensitive negative resin compositions, dielectric films
TT
    therefrom, and organic electroluminescence displays therewith
IN
    Abe, Nobuki
PΑ
    Nippon Zeon Co., Ltd., Japan
SO
    Jpn. Kokai Tokkyo Koho, 20 pp.
    CODEN: JKXXAF
DT
    Patent
    Japanese
LA
CC
    74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
    Section cross-reference(s): 38
FAN.CNT 1
    PATENT NO.
                      KIND DATE APPLICATION NO.
                                                              DATE
                       _ 0F 2006179423
PRAI JP 2004-374128
                       A 20060706 JP 2004-374128 20041224
                              20041224
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
               IPCI H05B0033-22 [I,A]; G03F0007-004 [I,A]; G09F0009-30
                       [I,A]; H01L0027-32 [I,A]; H01L0027-28 [I,C*];
                       H05B0033-10 [I,A]; H05B0033-12 [I,A]; H01L0051-50
[I,A]
                FTERM 2H025/AA03; 2H025/AA13; 2H025/AA20; 2H025/AB17;
                       2H025/AB20; 2H025/AC01; 2H025/AD01; 2H025/BE00;
                       2H025/CB17; 2H025/CB28; 2H025/CB45; 2H025/CC17;
                       3K007/AB11; 3K007/AB18; 3K007/BA06; 3K007/DB03; 3K007/EB00; 3K007/FA01; 5C094/AA31; 5C094/BA27;
                       5C094/DA15; 5C094/FB15
    The compns. comprise (a) alkali-soluble resins (e.g., novolak resins,
AΒ
     polyhydroxystyrene), (b) photoacid generators, and (c) curing agents
```

- (e.g., melamines, epoxides). The compns. form edge-rounded dielec. films with less shrinkage.
- ST org electroluminescent display dielec film neg photoimaging; novolak melamine resin photoacid generator EL display insulator; display edge rounded insulator film shrinkage prevention
- IT Electroluminescent devices

(displays; radiation-sensitive neg. resin compns. forming edge-rounded dielec. films for EL displays)

IT Luminescent screens

(electroluminescent; radiation-sensitive neg. resin compns. forming edge-rounded dielec. films for EL displays)

IT Phenolic resins, uses

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(novolak; radiation-sensitive neg. resin compns. forming edge-rounded dielec. films for EL displays)

IT Photoimaging materials

(photopolymerizable; radiation-sensitive neg. resin compns. forming edge-rounded dielec. films for EL displays)

IT Dielectric films

(radiation-sensitive neg. resin compns. forming edge-rounded dielec. films for EL displays)

IT Aminoplasts

RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)

(radiation-sensitive neg. resin compns. forming edge-rounded dielec. films for EL displays)

IT 9003-08-1, Melamine resin

RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)

(Cymel 300, Nikalac MW 30HM, curing agents; radiation-sensitive neg. resin compns. forming edge-rounded dielec. films for EL displays)

IT 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(LC 5080G, LC 4050G; radiation-sensitive neg. resin compns. forming edge-rounded dielec. films for EL displays)

IT 24979-70-2, S 4P

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(S 4P; radiation-sensitive neg. resin compns. forming edge-rounded dielec. films for EL displays)

IT 42880-07-9 156360-76-8

RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)

(photoacid generators; radiation-sensitive neg. resin compns. forming edge-rounded dielec. films for EL displays)

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

UPOS.G Date last citing reference entered STN: 16 Feb 2009

OS.G CAPLUS 2008:774281; 2008:283298

L6 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2005:1283069 CAPLUS <<LOGINID::20100303>>

DN 144:43286

```
Entered STN: 08 Dec 2005
ED
    Radiation sensitive composition for color filter, method of forming the
TT
    color filter under low oxygen atmosphere, and liquid crystal display
ΙN
    Koyama, Kiyoshi; Numata, Atsushi; Kobayashi, Kazuhiro
PA
   Jsr Ltd., Japan
SO
   Jpn. Kokai Tokkyo Koho, 22 pp.
    CODEN: JKXXAF
DT Patent
LA Japanese
IC
   ICM G02B005-20
    ICS G03F007-004; H01L021-027
    74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 1
    PATENT NO.
                                       APPLICATION NO.
                     KIND DATE
                                                             DATE
                      ____
                                        _____
    JP 2005338117
                       A 20051208 JP 2004-152781
                                                             20040524
PRAI JP 2004-152781
                             20040524
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 _____
                      ______
JP 2005338117 ICM G02B005-20
                     G03F007-004; H01L021-027
               ICS
               IPCI G02B0005-20 [ICM, 7]; G03F0007-004 [ICS, 7];
H01L0021-027
                      [ICS,7]; H01L0021-02 [ICS,7,C*]
               FTERM 2H025/AA02; 2H025/AB13; 2H025/AC01; 2H025/AD01;
                      2H025/BC13; 2H025/BC42; 2H025/CA00; 2H025/CB42;
                      2H025/CC11; 2H025/CC20; 2H025/FA03; 2H025/FA17;
                      2H048/BA02; 2H048/BA45; 2H048/BA47; 2H048/BA48;
                      2H048/BB02; 2H048/BB42
    Disclosed is a radiation sensitive composition comprising a pigment, a
AB
    dispersing agent, an alkali-soluble resin, a polyfunctional monomer, and
    photopolymn. initiator, wherein a content of the photopolymn. initiator
on
    the basis of the polyfunctional monomer 100 weight parts is 0.5-5 weight
parts.
    Also disclosed is a process, in which radiation (e.g., UV light) is
    directed to a film of said composition under a low O2 atmospheric,
preferably, a
    reduced pressure. A liquid crystal display having said color filter is
also
    claimed.
    radiation sensitive compn color filter liq crystal display; UV
photolithog
    photosensitive compn
ΙT
    Liquid crystal displays
    Optical filters
    Photolithography
       (Radiation sensitive composition for LCD color filter exposed under
reduced
       oxygen concentration)
ΙT
    29570-58-9, Dipentaerythritol hexaacrylate
```

RL: DEV (Device component use); USES (Uses) (Radiation sensitive composition for LCD color filter exposed under reduced oxygen concentration) 7782-44-7, Oxygen, miscellaneous ΙT RL: MSC (Miscellaneous) (Radiation sensitive composition for LCD color filter exposed under reduced oxygen concentration) ΙT 7189-82-4 42880-07-9 119313-12-1 RL: CAT (Catalyst use); USES (Uses) (photopolymn. initiator; Radiation sensitive composition for LCD color filter exposed under reduced oxygen concentration) ANSWER 7 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN L6 2002:748352 CAPLUS <<LOGINID::20100303>> AN 137:286432 DN ED Entered STN: 03 Oct 2002 ΤI Negative-working photoresist compositions containing specific photoacid generator and method for pattern formation using the same Kashiwagi, Mikifumi; Kusu, Tetsuaki; Mitao, Tokuyuki ΙN Nippon Zeon Co., Ltd., Japan PAJpn. Kokai Tokkyo Koho, 7 pp. CODEN: JKXXAF DT Patent LA Japanese IC ICM G03F007-004 ICS G03F007-004; C08K005-3492; C08L101-14; G03F007-40 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other CC Reprographic Processes) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_\_ PI JP 2002287341 JP 4380075 PRAI JP 2001-84404 A 20021003 JP 2001-84404 B2 20091209 20010323 20010323 CLASS PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES JP 2002287341 ICM G03F007-004 ICS G03F007-004; C08K005-3492; C08L101-14; G03F007-40 IPCI G03F0007-004 [I,A]; C08K0005-3492 [I,A]; C08K0005-00 [I,C\*]; C08L0101-14 [I,A]; C08L0101-00 [I,C\*]; G03F0007-40 [I,A] IPCR G03F0007-004 [I,C\*]; G03F0007-004 [I,A]; C08K0005-00 [I,C\*]; C08K0005-3492 [I,A]; C08L0101-00 [I,C\*]; C08L0101-14 [I,A]; G03F0007-40 [I,C\*]; G03F0007-40 [I,A]

AB The title composition contains alkali solubilizable resins, a photoacid generator, a cross linking agent, and a solvent, wherein the photoacid generator has 300-450 nm  $\lambda$ max and  $\geq 2500$  mol absorbance( $\epsilon$ ), and satisfies the equation:  $\epsilon \geq (400 \text{X} \lambda \text{max}) - 120000$ . The composition shows the good storageability and provide pattern profile of reverse taper, which is

```
ST
    neg working photoresist compn photoacid generator
    Light-sensitive materials
ΙT
    Negative photoresists
       (neg.-working photoresist compns. and method for pattern formation
       using same)
    Electroluminescent devices
ΙT
       (panels; neq.-working photoresist compns. and method for pattern
       formation using same)
ΙT
    1898-74-4, s-Triazine, 2, 4-diphenyl- 42573-57-9,
    1,3,5-Triazine,2-[2-(4-methoxyphenyl)ethenyl]-4,6-bis(trichloromethyl)-
    42880-07-9, 1,3,5-Triazine,2-[2-(3,4-dimethoxyphenyl)ethenyl]-4,6-
    bis(trichloromethyl) - 79771-30-5 202074-55-3,
    1,3,5-Triazine,2-[2-(3-chloro-4-methoxyphenyl)ethenyl]-4,6-
    bis(trichloromethyl)
    RL: CAT (Catalyst use); USES (Uses)
       (photopolymn. initiator; neg.-working photoresist compns. and method
       for pattern formation using same)
            THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
UPOS.G Date last citing reference entered STN: 16 Feb 2009
OS.G CAPLUS 2004:780749
    ANSWER 8 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
    AN
DN
    133:259335
ED
   Entered STN: 14 Sep 2000
TΙ
    Actinic ray-sensitive resist composition for manufacture of liquid
crystal
    display color filter
    Sakurai, Koichi; Nagatsuka, Tomio; Kamii, Hideyuki; Watanabe, Takeshi
ΙN
   JSR Co., Ltd., Japan
PΑ
SO
   Jpn. Kokai Tokkyo Koho, 20 pp.
    CODEN: JKXXAF
DT
   Patent
   Japanese
LA
IC
    ICM G02B005-20
    ICS C08K005-20; C08L101-12; G03F007-004; G03F007-028
    74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 1
    PATENT NO.
                     KIND DATE APPLICATION NO. DATE
                      ____
                                        _____
    JP 2000249826
                      Α
                           20000914 JP 1999-55204
                                                       19990303
PRAI JP 1999-55204
                            19990303
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 _____
                     ______
JP 2000249826
               ICM
                     G02B005-20
                     C08K005-20; C08L101-12; G03F007-004; G03F007-028
               ICS
                    G02B0005-20 [ICM,7]; C08K0005-20 [ICS,7]; C08L0101-12
               IPCI
                      [ICS, 7]; G03F0007-004 [ICS, 7]; G03F0007-028 [ICS, 7]
               IPCR
                     G03F0007-004 [I,C*]; G03F0007-004 [I,A]; C08K0005-00
                      [I,C*]; C08K0005-20 [I,A]; C08L0101-00 [I,C*];
                     C08L0101-12 [I,A]; G02B0005-20 [I,C*]; G02B0005-20
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suitable as insulative ribs in organic EL display panels.

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[I,A]; G03F0007-028 [I,C*]; G03F0007-028 [I,A]
     The title composition comprises (A) colorant, (B) alkaline-soluble
AB
    polyfunctional monomer, (D) monofunctional monomer
     CH2:CR1CONH(CH2)iC(OCmH2m+1)HCO2CnH2n+1 [R1 = H, CH3; i = 0-2; m = 1-4; n
     = 1-4, and (E) photopolymn. initiator. The obtained filter shows
     excellent scratch-resistance.
    photoresist compn methacrylamide acrylamide photopolymn initiator color
    filter manuf
ΙT
    Liquid crystal displays
    Photoresists
        (actinic ray-sensitive resist composition for manufacture of liquid
crystal display
        color filter)
     141655-30-3, Benzyl methacrylate-2-hydroxyethyl methacrylate-methacrylic
     acid copolymer 215383-54-3, Benzyl methacrylate-methacrylic
     acid-N-phenylmaleimide-styrene copolymer 283597-64-8, Benzyl
     methacrylate-methacrylic acid-mono(2-acryloyloxyethyl)succinate-N-
    phenylmaleimide-styrene copolymer
                                        283605-07-2, Methacrylic
     acid-styrene-benzyl methacrylate-glycerol
     monomethacrylate-N-phenylmaleimide copolymer
                                                    294849-96-0, Benzyl
     methacrylate-m-carboxylpolycaprolactone monoacrylate-glycerol
     monomethacrylate-methacrylic acid-N-phenylmaleimide-styrene copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (alkaline soluble polymer in actinic ray-sensitive resist composition
for manufacture of
        liquid crystal display color filter)
ΙT
     294850-08-1P 294850-11-6P
                                  294850-14-9P
                                                  294850-17-2P
                                                                 294850-20-7P
                  294850-26-3P
     294850-23-0P
     RL: DEV (Device component use); PNU (Preparation, unclassified); PREP
     (Preparation); USES (Uses)
        (color filter of liquid crystal display obtained from actinic
        ray-sensitive resist composition)
ΙT
     147-14-8, C.I.Pigment Blue 15:6
                                       215247-95-3, C.I.Pigment Violet 23
     RL: TEM (Technical or engineered material use); USES (Uses)
        (colorant in actinic ray-sensitive resist composition for manufacture
of liquid
        crystal display blue filter)
ΙT
     1328-53-6, C.I.Pigment Green 7
                                      5567-15-7, C.I.Pigment Yellow 83
     14302-13-7, C.I.Pigment Green 36
                                        30125-47-4, C.I.Pigment Yellow 138
     872613-79-1, C.I.Pigment Yellow 150
    RL: TEM (Technical or engineered material use); USES (Uses)
        (colorant in actinic ray-sensitive resist composition for manufacture
of liquid
        crystal display green filter)
     128-69-8, C.I.Pigment Red 224 4051-63-2, C.I.Pigment Red 177
ΤТ
     36888-99-0, C.I.Pigment Yellow 139 84632-65-5, C.I.Pigment Red 254
     RL: TEM (Technical or engineered material use); USES (Uses)
        (colorant in actinic ray-sensitive resist composition for manufacture
of liquid
        crystal display red filter)
                  77402-15-4
                              141392-64-5
                                             294849-99-3
TT
     77402-03-0
     RL: TEM (Technical or engineered material use); USES (Uses)
        (monofunctional monomer in actinic ray-sensitive resist composition
for
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manufacture of liquid crystal display color filter)
    90-93-7, 4,4'-Bis(diethylamino)benzophenone 149-30-4,
ΤТ
     2-Mercaptobenzothiazole 7189-83-5 42880-07-9 119313-12-1,
     2-Benzyl-2-dimethylamino-1-(4-morpholinophenyl)butanone
    RL: TEM (Technical or engineered material use); USES (Uses)
       (photopolymn. initiator in actinic ray-sensitive resist composition
for
       manufacture of liquid crystal display color filter)
ΙT
    29570-58-9, Dipentaerythritol hexaacrylate
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polyfunctional monomer in actinic ray-sensitive resist composition
for
       manufacture of liquid crystal display color filter)
       1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
OSC.G
UPOS.G Date last citing reference entered STN: 21 Sep 2009
OS.G CAPLUS 2009:1108696
1.6
    ANSWER 9 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
AN
    DN
    133:170304
   Entered STN: 04 Aug 2000
ED
TΙ
    UV-sensitive color filter composition
   Sakurai, Koichi; Yoshida, Koichiro; Watanabe, Takeshi
ΙN
PΑ
   JSR Co., Ltd., Japan
SO
   Jpn. Kokai Tokkyo Koho, 24 pp.
    CODEN: JKXXAF
   Patent
DT
LA
   Japanese
IC
    ICM G03F007-085
    ICS C08F002-48; C08F004-00; G02B005-20; G03F007-004
    74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 1
    PATENT NO.
                      KIND DATE
                                        APPLICATION NO.
                                                              DATE
    _____
                      ____ ______
   JP 2000214592
                     A 20000804 JP 1999-15848
B2 20080820
                                                             19990125
JP 4135247
PRAI JP 1999-15848
                             19990125
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
JP 2000214592 ICM G03F007-085
                     C08F002-48; C08F004-00; G02B005-20; G03F007-004
                ICS
                IPCI G03F0007-085 [I,A]; G03F0007-028 [I,A]; G03F0007-004
                      [I,A]; C08F0002-48 [I,A]; C08F0002-46 [I,C*];
                      C08F0004-00 [I,A]; G02B0005-20 [I,A]
                      G03F0007-004 [I,C*]; G03F0007-004 [I,A]; C08F0002-46 [I,C*]; C08F0002-48 [I,A]; C08F0004-00 [I,C*];
                IPCR
                      C08F0004-00 [I,A]; G02B0005-20 [I,C*]; G02B0005-20
                       [I,A]; G03F0007-085 [I,C*]; G03F0007-085 [I,A];
                       G03F0007-028 [I,C]; G03F0007-028 [I,A]
    The invention relates to an UV-sensitive color filter composition
containing: (A) a
     colorant; (B) an alkali soluble resin; (C) a monomer having plural
functional
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groups; (D) a photopolymn. initiator; and (E) an oxetane.
composition
    provides the increased hardness of the color filter film.
ST
    color filter compn
ΙT
    Optical filters
    Optical imaging devices
       (UV-sensitive color filter composition)
ΙT
    90-93-7, 4,4'-Bis(diethylamino)benzophenone 149-30-4,
    2-Mercaptobenzothiazole 3047-32-3 5567-15-7, C.I. Pigment Yellow 83
    7189-83-5 14302-13-7, C.I. Pigment Green 36 29570-58-9,
    Dipentaerythritol hexaacrylate 30125-47-4, C.I. Pigment Yellow 138
    42573-57-9 42880-07-9 71255-78-2 119313-12-1,
    2-Benzyl-2-dimethylamino-1-(4-morpholinophenyl)butanone 141655-30-3,
    Methacrylic acid-2-hydroxyethyl methacrylate-benzyl methacrylate
copolymer
    142627-97-2 283597-64-8, Methacrylic acid-mono(2-acryloyloxyethyl)
     succinate-styrene-benzyl methacrylate-N-phenylmaleimide copolymer
     283605-07-2, Methacrylic acid-styrene-benzyl methacrylate-glycerol
    monomethacrylate-N-phenylmaleimide copolymer 872613-79-1, C.I. Pigment
    Yellow 150
    RL: TEM (Technical or engineered material use); USES (Uses)
        (UV-sensitive color filter composition)
    ANSWER 10 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
L6
AN
    2000:151333 CAPLUS <<LOGINID::20100303>>
DN
    132:201079
ED
   Entered STN: 07 Mar 2000
ΤI
    Dye with protected hydroxy group and thermal-transfer printing material
IN
   Furukawa, Minoru; Hanmura, Masahiro; Equchi, Hiroshi
   Dai Nippon Printing Co., Ltd., Japan
PA
SO
    Jpn. Kokai Tokkyo Koho, 28 pp.
    CODEN: JKXXAF
DT
   Patent
LA
   Japanese
IC
    ICM B41M005-38
CC
    74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
    Section cross-reference(s): 41
FAN.CNT 1
    PATENT NO.
                      KIND DATE APPLICATION NO. DATE
PI JP 2000071631
PRAI JP 1998-247136
                       A 20000307 JP 1998-247136 19980901
                              19980901
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 _____
JP 2000071631 ICM
                      B41M005-38
                IPCI B41M0005-38 [ICM, 7]
                IPCR B41M0005-382 [I,A]; B41M0005-26 [I,C*]; B41M0005-385
                       [I,A]; B41M0005-388 [I,A]; B41M0005-39 [I,A];
                       B41M0005-392 [I,A]; B41M0005-50 [I,C*]; B41M0005-50
                       [I,A]; B41M0005-52 [I,A]
OS
    MARPAT 132:201079
    The dye is protected at least partially on OH by a group, which is
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converted into a volatile substance after releasing from the dye. The
    protecting group leaves a portion linkable with OH, i.e., the exact
    original dye is obtained after removal of the protecting group. The
    thermal-transfer printing material consists of a material with a layer
    containing the dye protected by the group leaving under heat and another
    material having an image-accepting layer containing an acid for
accelerating
    removal of the protecting group. The dye-containing layer and the
     image-accepting layer are laminated and patternwise heated to give an
     image on the accepting layer. The thermally transfered image shows
    prevention of discoloration caused by the residue of protecting group.
ST
    dye protecting group thermal transfer printing; acid catalyst protecting
    group removal acceleration; hydroxy group protected dye thermal printing
ΙT
    Dyes
    Thermal-transfer printing materials
       (dye protected on hydroxy group for thermal-transfer printing)
ΤT
     Dissociation catalysts
       (for accelerating removal of protecting group from dye in
       thermal-transfer printing material)
ΙT
     79014-78-1
                 107689-41-8
                              109194-20-9
                                            123520-93-4
                                                          147613-95-4
     260061-37-8
                  260061-38-9
                                260061-39-0
                                             260061-40-3
                                                           260061-41-4
     260061-42-5
                  260061-43-6
                                260061-44-7
                                             260061-45-8
                                                           260061-59-4
     260061-60-7
                  260061-64-1
                               260061-67-4
    RL: TEM (Technical or engineered material use); USES (Uses)
       (dye protected on hydroxy group for thermal-transfer printing)
ΙT
    104-15-4, uses 120-18-3, 2-Naphthalene sulfonic acid
                                                           949-42-8
                                                              10287-53-3
     1226-42-2 3584-23-4 5551-72-4 6293-66-9 6542-67-2
    24504-22-1 34684-40-7
                            41580-58-9
                                         42573-57-9
                                                      42880-07-9
     42880-08-0 42880-12-6 55048-39-0 57835-99-1
                                                      57840-38-7
    61358-23-4 61358-25-6 62051-09-6 63226-13-1 66003-76-7
    66003-78-9
               69432-40-2 71255-78-2 71449-78-0
                                                      73674-58-5
    80050-87-9 81416-37-7 82424-53-1 83697-53-4 83697-56-7
    84563-54-2 85342-62-7 87709-41-9 90555-42-3 115298-63-0
    116808-67-4 127279-74-7 142342-33-4 151052-45-8
                                                           160481-39-0
    179419-32-0
                 193345-23-2
                              194999-82-1 194999-85-4 202074-55-3
    260061-46-9
                 260061-47-0
                              260061-48-1 260061-49-2
                                                           260061-51-6
    260061-52-7
                  260061-53-8
                              260061-55-0 260061-57-2 260061-58-3
    RL: CAT (Catalyst use); USES (Uses)
        (for accelerating removal of protecting group from dye in
       thermal-transfer printing material)
    ANSWER 11 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
L6
    1997:577009 CAPLUS <<LOGINID::20100303>>
AN
    127:177245
DN
OREF 127:34346h,34347a
    Entered STN: 11 Sep 1997
ED
ΤI
    Colored photosensitive acrylic resin compositions using safe solvents and
     color filters using the same
IN
     Tateno, Masahiko; Hidaka, Takahiro
PA
    Sekisui Chemical Co. Ltd., Japan
    Jpn. Kokai Tokkyo Koho, 8 pp.
    CODEN: JKXXAF
DT
    Patent
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Japanese

LA

ICM G02B005-20 IC ICS C08F290-06; C08L033-04; G03F007-004; G03F007-027; G03F007-029 CC 37-6 (Plastics Manufacture and Processing) FAN.CNT 1 KIND DATE PATENT NO. APPLICATION NO. ---- ------JP 09178932 A 19970711 JP 1995-340853 19951227 PRAI JP 1995-340853 19951227 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES \_\_\_\_\_ JP 09178932 ICM G02B005-20 ICS C08F290-06; C08L033-04; G03F007-004; G03F007-027; G03F007-029 IPCI G02B0005-20 [ICM, 6]; C08F0290-06 [ICS, 6]; C08L0033-04 [ICS,6]; G03F0007-004 [ICS,6]; G03F0007-027 [ICS,6]; G03F0007-029 [ICS,6] G03F0007-004 [I,C\*]; G03F0007-004 [I,A]; C08F0290-00 [I,C\*]; C08F0290-00 [I,A]; C08F0290-06 [I,A]; IPCR C08L0033-00 [I,C\*]; C08L0033-04 [I,A]; G02B0005-20 [I,C\*]; G02B0005-20 [I,A]; G03F0007-027 [I,C\*]; G03F0007-027 [I,A]; G03F0007-029 [I,C\*]; G03F0007-029 [I,A] AB The title compns. use Et lactate as the solvent and polyfunctional monomers chosen from pentaerythritol acrylate, ethoxylated trimethylolpropane triacrylate, and dipentaerythritol hexaacrylate. A binder resin was prepared from acrylic acid 15, 2-hydroxyethyl methacrylate 35, Bu methacrylate 35, and Me methacrylate 15 parts and used as 10%-solids solution in Et lactate with PE-3A crosslinker and Irgacure 369, Kayacure CPTX, and Kayacure DMBI, for testing without pigment. ST color filter photosensitive acrylic compn ΙT Optical filters (colored photosensitive acrylic resin compns. using safe solvents and color filters using the same) ΤT Crosslinking catalysts (photochem.; colored photosensitive acrylic resin compns. using safe solvents and color filters using the same) ΙT 142770-42-1, 1-Chloro-4-propoxythioxanthone RL: CAT (Catalyst use); USES (Uses) (Kayacure CPTX; colored photosensitive acrylic resin compns. using safe solvents and color filters using the same) 21245-01-2, Isoamyl 4-(dimethylamino)benzoate RL: CAT (Catalyst use); USES (Uses) (Kayacure DMBI; colored photosensitive acrylic resin compns. using solvents and color filters using the same) ΙT 160509-79-5, 2-(3,4,5-Trimethoxystyryl)-4,6-bis(trichloromethyl)-striazine RL: CAT (Catalyst use); USES (Uses) (TAZ 111; colored photosensitive acrylic resin compns. using safe solvents and color filters using the same)

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42880-07-9, 2-(3,4-Dimethoxystyryl)-4,6-bis(trichloromethyl)-s-
ΙT
    triazine
    RL: CAT (Catalyst use); USES (Uses)
       (TAZ 113; colored photosensitive acrylic resin compns. using safe
       solvents and color filters using the same)
ΙT
    151052-45-8, 2-(2-Methoxystyryl)-4,6-bis(trichloromethyl)-s-triazine
     RL: CAT (Catalyst use); USES (Uses)
       (TAZ 118; colored photosensitive acrylic resin compns. using safe
       solvents and color filters using the same)
ΙT
    119313-12-1, Irgacure 369
    RL: CAT (Catalyst use); USES (Uses)
       (colored photosensitive acrylic resin compns. using safe solvents and
       color filters using the same)
    193827-91-7P 193827-94-0P 193827-96-2P
ΙT
    RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
     (Properties); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
       (colored photosensitive acrylic resin compns. using safe solvents and
       color filters using the same)
     97-64-3, Ethyl lactate
ΙT
    RL: NUU (Other use, unclassified); USES (Uses)
       (colored photosensitive acrylic resin compns. using safe solvents and
       color filters using the same)
L6
    ANSWER 12 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
AN
    1996:455321 CAPLUS <<LOGINID::20100303>>
    125:100184
DN
OREF 125:18559a,18562a
ED Entered STN: 01 Aug 1996
TI Photoresist composition and etching method
IN Yoshimoto, Hiroshi
PA Fuji Photo Film Co Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
    CODEN: JKXXAF
DT Patent
LA Japanese
IC
   ICM G03F007-004
    ICS G03F007-038; G03F007-039
    74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 1
    PATENT NO.
                      KIND DATE APPLICATION NO. DATE
                       ____
                                         _____
PI JP 08110637
PRAI JP 1994-244425
                       A 19960430 JP 1994-244425
                                                             19941007
                             19941007
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 _____
               ____
                      ______
JP 08110637
                ICM
                      G03F007-004
                ICS
                      G03F007-038; G03F007-039
                      G03F0007-004 [ICM,6]; G03F0007-038 [ICS,6];
                IPCI
                      G03F0007-039 [ICS,6]
                IPCR G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-038
                      [I,C*]; G03F0007-038 [I,A]; G03F0007-039 [I,C*];
```

G03F0007-039 [I,A]

OS MARPAT 125:100184

GΙ

$$R^1$$
 $N$ 
 $CH = CH$ 
 $R^4$ 
 $R^3$ 
 $R^2$ 

II

 $\begin{array}{c|c}
R1 \\
N \\
N \\
R2
\end{array}$   $\begin{array}{c|c}
N \\
R6 \\
R7
\end{array}$ 

$$\begin{array}{c|c}
R1 \\
N \\
N \\
R2
\end{array}$$
 $\begin{array}{c|c}
CH = CH - R9 \\
\end{array}$ 

III

AB The photoresist composition comprises (a) a novolak resin, (b) an acid crosslinking compound, (c) propylene glycol monoalkyl ether and/or its esters, (d) a photosensitive s-triazine compound I, and (e) another photosensitive s-triazine compound selected from I, II, and III [R1-2 =

C1-3

haloalkyl, haloalkenyl; R3 = halo, (substituted) alkyl, alkoxy, (substituted) aryl; R4-5 = H, halo, (substituted) alkyl, alkoxy, (substituted) aryl; R6-7 = H, (substituted) alkyl, alkoxy, (substituted) aryl; R8 = H, halo, alkyl, alkoxy; R9 = heterocyclyl, aryl which may be substituted at positions other than 4]. The etching method comprises (1) coating the photoresist on a substrate, (2) patternwise exposing the photoresist, and (3) wet-etching the substrate using the patterned photoresist. The photoresist shows high sensitivity, good coating property, prevents the generation of developing residue, and is useful

for

manufacture of semiconductor devices.

ST photoresist triazine compd novolak resin; etching method photoresist

IT Phenolic resins, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(novolak, photoresist composition containing triazine compound as photosensitive

acid generator)

IT Resists

(photo-, photoresist composition containing triazine compound as photosensitive

acid generator)

IT 9003-08-1, Nikalac mw 30m

RL: TEM (Technical or engineered material use); USES (Uses)

```
(acid crosslinking agent; photoresist composition containing triazine
compound as
        photosensitive acid generator)
IΤ
     42573-57-9 42880-05-7 42880-06-8 42880-07-9 42880-08-0
     129509 - 22 - 4 151052 - 44 - 7 151052 - 45 - 8 154880 - 07 - 6 155050 - 58 - 1
     156360-76-8 160509-79-5 166891-15-2 179037-28-6 179037-29-7
     179037-30-0
     RL: CAT (Catalyst use); USES (Uses)
        (photoresist composition containing triazine compound as
photosensitive acid
       generator)
ΙT
     84540-57-8D, Propylene glycol monomethyl ether acetate, solvent
     RL: NUU (Other use, unclassified); USES (Uses)
        (photoresist composition containing triazine compound as
photosensitive acid
        generator)
     27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer
ΤТ
     RL: TEM (Technical or engineered material use); USES (Uses)
        (photoresist composition containing triazine compound as
photosensitive acid
        generator)
     ANSWER 13 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
1.6
     124:356261
OREF 124:65901a,65904a
ED Entered STN: 04 Jun 1996
ΤI
    Color filter for liquid-display panel
IN Kashiwazaki, Akio; Sato, Hiroshi; Shirota, Katsuhiro; Yokoi, Hideto;
    Miyazaki, Takeshi; Shiba, Shoji
PA
   Canon K. K., Japan
SO Eur. Pat. Appl., 36 pp.
    CODEN: EPXXDW
DT
    Patent
   English
LA
IC
    ICM G02B005-20
     ICS G02F001-1335
     74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
FAN.CNT 1
                   KIND DATE APPLICATION NO. DATE
     PATENT NO.
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                                           _____
    EP 704722
                         A2 19960403 EP 1995-115446
PΤ
                                                                19950929
                         A3 19960828
     EP 704722
     EP 704722 B1
                               20021218
        R: DE, FR, GB, IT
JP 08227011 A 19960903

US 5716739 A 19980210

KR 175420 B1 19990320

PRAI JP 1994-237096 A 19940930

JP 1994-319991 A 19941222

JP 1995-247970 A 19950926
                                         JP 1995-247970
US 1995-536781
KR 1995-33427
                                                                 19950926
                                                                  19950929
                                                                   19950930
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
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EP 704722
                 ICM
                        G02B005-20
                 ICS
                        G02F001-1335
                        G02B0005-20 [ICM, 6]; G02F0001-1335 [ICS, 6];
                 IPCI
G02F0001-13
                        [ICS, 6, C*]
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                        [I,C*]; B41M0005-00 [I,A]; B41M0005-50 [I,C*];
                        B41M0005-50 [I,A]; B41M0005-52 [I,A]; C08F0020-00
                        [I,C*]; C08F0020-52 [I,A]; C08F0020-56 [I,A];
                        C08G0059-00 [I,C*]; C08G0059-50 [I,A]; G02B0005-20
                        [I,C*]; G02B0005-20 [I,A]; G02B0005-22 [I,C*];
                        G02B0005-22 [I,A]; G02F0001-13 [I,C*]; G02F0001-1335
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                 ECLA
                        G02B005/22D
JP 08227011
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                        G02B0005-20 [ICM,6]; B41J0002-01 [ICS,6]; C08F0020-56
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                        C08G0059-00 [ICS,6,C*]; G02F0001-1335 [ICS,6];
                        G02F0001-13 [ICS, 6, C*]
                        B41J0002-01 [I,C*]; B41J0002-01 [I,A]; B41M0005-00
                 IPCR
                        [I,C*]; B41M0005-00 [I,A]; B41M0005-50 [I,C*];
                        B41M0005-50 [I,A]; B41M0005-52 [I,A]; C08F0020-00
                        [I,C*]; C08F0020-52 [I,A]; C08F0020-56 [I,A];
                        C08G0059-00 [I,C*]; C08G0059-50 [I,A]; G02B0005-20
                        [I,C*]; G02B0005-20 [I,A]; G02B0005-22 [I,C*];
                        G02B0005-22 [I,A]; G02F0001-13 [I,C*]; G02F0001-1335
                        [I,A]
                 ECLA
                        G02B005/22D
 US 5716739
                 IPCI
                        G02B0005-20 [ICM,6]; G02F0001-1335 [ICS,6];
G02F0001-13
                        [ICS, 6, C*]
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                        B41J0002-01 [I,C*]; B41J0002-01 [I,A]; B41M0005-00
                        [I,C*]; B41M0005-00 [I,A]; B41M0005-50 [I,C*];
                        B41M0005-50 [I,A]; B41M0005-52 [I,A]; C08F0020-00
                        [I,C*]; C08F0020-52 [I,A]; C08F0020-56 [I,A];
                        C08G0059-00 [I,C*]; C08G0059-50 [I,A]; G02B0005-20
                        [I,C*]; G02B0005-20 [I,A]; G02B0005-22 [I,C*];
                        G02B0005-22 [I,A]; G02F0001-13 [I,C*]; G02F0001-1335
                        [I,A]
                 NCL
                        430/007.000; 347/106.000; 427/164.000; 427/492.000;
                        427/493.000; 427/511.000; 427/512.000; 430/321.000
                 ECLA
                        G02B005/22D
                 IPCI
 KR 175420
                        G02F0001-1335 [ICM, 7]; G02F0001-13 [ICM, 7, C*]
                        B41J0002-01 [I,C*]; B41J0002-01 [I,A]; B41M0005-00
                 IPCR
                        [I,C*]; B41M0005-00 [I,A]; B41M0005-50 [I,C*];
                        B41M0005-50 [I,A]; B41M0005-52 [I,A]; C08F0020-00
                        [I,C*]; C08F0020-52 [I,A]; C08F0020-56 [I,A];
                        C08G0059-00 [I,C*]; C08G0059-50 [I,A]; G02B0005-20
                        [I,C*]; G02B0005-20 [I,A]; G02B0005-22 [I,C*];
                        G02B0005-22 [I,A]; G02F0001-13 [I,C*]; G02F0001-1335
                        [I,A]
                 ECLA
                        G02B005/22D
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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AB The title color filter is prepared by ink-jet printing of a material having

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an ink-receiving layer comprising a homopolymer of a monomer having the
    structure CH2=CR1[CON(CH2OR2)(CH2OR3)]] (R1 = H or methyl; R2, R3 = H or
    alkyl having 1-5 C atoms) or its copolymer with one or more other vinyl
    monomers.
    color filter ink jet vinyl polymer; lig crystal display color filter
ST
ΙT
    Optical filters
       (color; preparation by ink-jet printing on ink-receiving layers
containing vinyl
       polymers for liquid-crystal display devices)
    Optical imaging devices
ΙT
       (electrooptical liquid-crystal, color filters prepared by ink-jet
printing
       on ink-receiving layers containing vinyl polymers for)
    Printing, nonimpact
ΤT
       (ink-jet, on ink-receiving layers containing vinyl polymers for color
       filter preparation for liquid-crystal display devices)
    313-39-3, Diphenyliodonium tetrafluoroborate 3584-23-4
ΤТ
    hexafluorophosphate 66003-76-7 66003-78-9 69432-40-2 75482-18-7
    84563-54-2 116808-67-4
176979-04-7 176979-06-9
                             176979-01-4 176979-02-5
                                                       176979-03-6
    RL: TEM (Technical or engineered material use); USES (Uses)
       (in preparing ink-receiving layers for color filter preparation by
ink-iet
       printing for liquid-crystal display devices)
      6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
UPOS.G Date last citing reference entered STN: 22 Jan 2010
OS.G CAPLUS 2009:267586; 2009:1618157; 2007:359100; 2009:490065;
2001:472600;
             2000:699107
1.6
    ANSWER 14 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
ΑN
    1995:753433 CAPLUS <<LOGINID::20100303>>
DN
    123:156423
OREF 123:27615a,27618a
   Entered STN: 24 Aug 1995
ΤI
    Negative-type photoresist composition
IN Yoshimoto, Hiroshi; Kokubo, Tadayoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Ger. Offen., 12 pp.
    CODEN: GWXXBX
DT
   Patent
LA
   German
IC
    ICM G03F007-039
    ICS C08L061-06; C08K005-3492; C08J003-28; C08J003-24; C08F002-48;
         C08F026-06; C08F012-26
ICA C08F024-00; C08F028-06
    74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 1
                                       APPLICATION NO.
                      KIND
    PATENT NO.
                             DATE
                                                              DATE
                A1 19950413 DE 1994-4435791
PΙ
   DE 4435791
                                                               19941006
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JP 07140653
                               19950602
                                         JP 1993-251778
                                                                 19931007
                        Α
PRAI JP 1993-251778
                        Α
                               19931007
CLASS
PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
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DE 4435791
                ICM
                       G03F007-039
                ICS
                       C08L061-06; C08K005-3492; C08J003-28; C08J003-24;
                       C08F002-48; C08F026-06; C08F012-26
                ICA
                       C08F024-00; C08F028-06
                IPCI
                       G03F0007-039 [ICM,6]; C08L0061-06 [ICS,6]; C08L0061-00
                       [ICS, 6, C*]; C08K0005-3492 [ICS, 6]; C08K0005-00
                       [ICS,6,C*]; C08J0003-28 [ICS,6]; C08J0003-24 [ICS,6];
                       C08F0002-48 [ICS,6]; C08F0002-46 [ICS,6,C*];
                       C08F0026-06 [ICS,6]; C08F0026-00 [ICS,6,C*];
                       C08F0012-26 [ICS,6]; C08F0012-00 [ICS,6,C*];
                       C08F0024-00 [ICA,6]; C08F0028-06 [ICA,6]; C08F0028-00
                       [ICA, 6, C*]
                       C08F0002-46 [I,C*]; C08F0002-48 [I,A]; C08K0005-00
                IPCR
                       [I,C*]; C08K0005-3492 [I,A]; G03F0007-004 [I,C*];
                       G03F0007-004 [I,A]; G03F0007-029 [I,C*]; G03F0007-029
                       [I,A]; G03F0007-038 [I,C*]; G03F0007-038 [I,A];
                       H01L0021-02 [I,C*]; H01L0021-02 [I,A]; H01L0021-30
                       [I,A]
                ECLA
                       C08K005/3492+L61/06; G03F007/004D; G03F007/029A
JP 07140653
                IPCI
                       G03F0007-029 [ICM,6]; G03F0007-004 [ICS,6];
                       G03F0007-038 [ICS,6]; H01L0021-02 [ICS,6]
                IPCR
                       C08F0002-46 [I,C*]; C08F0002-48 [I,A]; C08K0005-00
                       [I,C*]; C08K0005-3492 [I,A]; G03F0007-004 [I,C*];
                       G03F0007-004 [I,A]; G03F0007-029 [I,C*]; G03F0007-029
                       [I,A]; G03F0007-038 [I,C*]; G03F0007-038 [I,A];
                       H01L0021-02 [I,C*]; H01L0021-02 [I,A]; H01L0021-30
                ECLA
                       C08K005/3492+L61/06; G03F007/004D; G03F007/029A
OS
    MARPAT 123:156423
GΙ
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Ι

 ${\tt AB}$  The title composition comprises a photosensitive s-triazine compound, a novolak

resin, an acid splittable compound and propylene glycol monoalkyl ether and/or its ester where the s-triazine compound is selected from I [R1, R2 =

haloalkyl, haloalkenyl; R3 = H, Me; R4 = aryl, heterocyclyl; n = 1, 2;  ${\bf Z}$  -

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bond, p-phenylene]. The material has improved solubility and
sensitivity and
    is almost free from any error.
ST
    photoresist compn neg triazine compd
IT Resists
       (photo-, neq.-type; s-triazine photosensitive compound)
ΙT
    42573-57-9 42880-03-5 42880-04-6 42880-05-7 42880-06-8
    42880-07-9 42880-08-0 42880-09-1 42880-10-4 97802-67-0
    97802-70-5 97802-71-6 97802-72-7 97802-73-8 97802-84-1
    129509 - 22 - 4 151052 - 44 - 7 154880 - 05 - 4 155050 - 58 - 1 156360 - 76 - 8
    166891-14-1 166891-15-2 166891-16-3 166891-17-4 166891-18-5
    166891-19-6 166891-20-9 166891-21-0 166891-22-1 166891-23-2
    166891-24-3 166891-25-4 166891-26-5 166891-27-6 166891-28-7
    166891-29-8 166891-30-1 166891-31-2 166891-32-3 166891-33-4
    166891-34-5 166891-35-6
    RL: MOA (Modifier or additive use); USES (Uses)
       (photosensitive compound)
       THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
OSC.G
UPOS.G Date last citing reference entered STN: 16 Feb 2009
OS.G CAPLUS 2002:253086
    ANSWER 15 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
    1995:717175 CAPLUS <<LOGINID::20100303>>
    123:213224
DΝ
OREF 123:37717a,37720a
ED Entered STN: 03 Aug 1995
ΤI
   Negative-working radiation-sensitive resist compositions containing
    bis(trichloromethyl)triazines
    Kobayashi, Masaichi; Yamazaki, Hiroyuki; Harada, Yoichiro; Tanaka,
ΙN
    Hatsuyuki; Nakayama, Toshimasa
PΑ
   Tokyo Ohka Kogyo Co Ltd, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
    CODEN: JKXXAF
DT
   Patent
   Japanese
LA
IC
   ICM G03F007-038
    ICS G03F007-004; G03F007-029; H01L021-027
    74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 1
    PATENT NO.
                     KIND DATE APPLICATION NO. DATE
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                                        _____
PI JP 07134412
PRAI JP 1993-282824
                      Α
                           19950523 JP 1993-282824
                                                           19931111
                             19931111
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
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 JP 07134412
               ICM
                     G03F007-038
                    G03F007-004; G03F007-029; H01L021-027
               ICS
                    G03F0007-038 [ICM,6]; G03F0007-004 [ICS,6];
               IPCI
                     G03F0007-029 [ICS,6]; H01L0021-027 [ICS,6];
H01L0021-02
                      [ICS, 6, C*]
               IPCR G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-029
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[I,C\*]; G03F0007-029 [I,A]; G03F0007-038 [I,C\*];
G03F0007-038 [I,A]; H01L0021-02 [I,C\*]; H01L0021-027
[I,A]

GΙ

AB The resist compns. contain: (A) an alkali soluble resin and an alkxoymethylated amino resin and (B) triazine derivs. I (R1-2 = C1-3 alkyl) or I and triazines II [Z = 4-alkoxyphenyl, 4-alkoxynaphthyl, 2-(3,5-dialkoxyphenyl)ethenyl, 2-(2-furyl)ethenyl, 2-(5-alkyl-2-furyl)ethenyl, 3,4-methylenedioxyphenyl,

2-(3,4-methylenedioxyphenyl) ethenyl]. The compns. show a high sensitivity

and high resolution and provide resist patterns with good profile.

ST neg working radiation sensitive resist; triazine photoacid generator radiation resist

IT Aminoplasts

RL: TEM (Technical or engineered material use); USES (Uses)
 (neg.-working radiation-sensitive resist compns. containing
 (dialkoxystyryl)bis(trichloromethyl)triazines as photoacid generators)
Phenolic resins, preparation

 $\mbox{RL: PNU (Preparation, unclassified); TEM (Technical or engineered material$ 

use); PREP (Preparation); USES (Uses)

(novolak, cresol-based, neg.-working radiation-sensitive resist compns.

containing (dialkoxystyryl)bis(trichloromethyl)triazines as photoacid
generators)

IT Resists

IT

(radiation-sensitive, neg.-working, neg.-working radiation-sensitive resist compns. containing

IT 3584-23-4, 2-(4-Methoxyphenyl)-4,6-bis(trichloromethyl)-1,3,5-triazine 27029-76-1, m-Cresol-p-cresol-formaldehyde copolymer 42880-07-9

156360-76-8 160818-06-4
RL: TEM (Technical or engineered material use); USES (Uses)
(neg.-working radiation-sensitive resist compns. containing

(dialkoxystyryl)bis(trichloromethyl)triazines as photoacid generators)
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
UPOS.G Date last citing reference entered STN: 16 Feb 2009

OS.G CAPLUS 2005:525068

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ANSWER 16 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
L6
AN 1977:163627 CAPLUS <<LOGINID::20100303>>
DN 86:163627
OREF 86:25625a,25628a
ED Entered STN: 12 May 1984
TI Chromophore-containing vinylhalomethyl-s-triazine photoinitiator
IN Bonham, James A.; Petrellis, Panayotis C.
PA Minnesota Mining and Manufacturing Co., USA
    U.S., 8 pp.
     CODEN: USXXAM
DT Patent
LA English
     C07D251-24
TC
INCL 260240000D
    74-4 (Radiation Chemistry, Photochemistry, and Photographic Processes)
FAN.CNT 3
      PATENT NO.
                                                      APPLICATION NO.
                             KIND DATE
     US 3987037 A 19761019 US 1971-177851
NL 7211076 A 19730306 NL 1972-11076
NL 172155 B 19830216
NL 172155 C 19830718
CA 986512 A1 19760330 CA 1972-150598
GB 1388492 A 19750326 GB 1972-40496
BE 788295 A1 19730301 BE 1972-121588
DE 2243621 A1 19730308 DE 1972-2243621
DE 2243621 C2 19870820
FR 2152039 A5 19730420 FR 1972-31062
BR 7206066 D0 19730724 BR 1972-6066
CH 576967 A5 19760630 CH 1972-12932
JP 48036281 A 19730528 JP 1972-88304
JP 59001281 B 19840111
IT 965195 B 19740131 IT 1972-52521
US 3954475 A 19760504 US 1973-395419
JP 56085746 A 19810713 JP 1980-144243
JP 57001819 B 19820113
US 1971-177851 A 19710903
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                                       19761019 US 1971-177851
PΙ
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                                                                                    19720901
                                                                                    19720901
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                                      19740131 IT 1972-52521
19760504 US 1973-395419
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                                                                                    19730910
PRAI US 1971-177851
                               Α
                                       19710903
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
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                     INCL 260240000D
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                              C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50
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                               [I,C*]; G03C0001-675 [I,A]; G03C0001-72 [I,C*];
                              G03C0001-72 [I,A]; G03F0007-004 [I,C*]; G03F0007-004
                              [I,A]; G03F0007-029 [I,C*]; G03F0007-029 [I,A]
                     NCL
                              544/216.000; 101/453.000; 430/281.100; 430/343.000;
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	ECLA	430/920.000; 522/063.000; 522/109.000; 522/121.000; 544/194.000; 544/211.000; 544/212.000; 544/219.000 C08F002/46+IDT; C09B023/00S; C09B023/06; C09B023/14; C09B023/14H; G03C001/675; G03F007/029A
NL 7211076	IPCI	C07D0055-12 [ICM]; C07D0057-00 [ICS]; G03C0001-68 [ICS]; G03C0001-72 [ICS]; C08F0001-16 [ICS]; C07D0099-02 [ICS]
	IPCR	C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24 [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A]; C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00 [I,C*]; C08F0002-46 [I,C*]; C08F0002-46 [I,A]; C08F0002-46 [I,C*]; C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50 [I,A]; C09B0023-00 [I,C*]; C09B0023-01 [I,A]; C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675 [I,C*]; G03C0001-675 [I,A]; G03C0001-72 [I,C*]; G03C0001-72 [I,A]; G03F0007-004 [I,A]; G03F0007-029 [I,A]
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CA 986512	IPCR	C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24 [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A]; C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00 [I,C*]; C08F0002-46 [I,C*]; C08F0002-46 [I,A]; C08F0002-46 [I,A]; C08F0002-50 [I,A]; C09B0023-00 [I,C*]; C09B0023-01 [I,A]; C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675 [I,C*]; G03C0001-675 [I,C*]; G03C0001-72 [I,A]; G03F0007-004 [I,A]; G03F0007-004 [I,A]; G03F0007-004 [I,A]; G03F0007-004 [I,A]; G03F0007-009 [I,A]
	ECLA	C08F002/46+IDT; C09B023/00S; C09B023/06; C09B023/14;
GB 1388492	IPCI	C09B023/14H; G03C001/675; G03F007/029A C09B0023-00 [ICM]; C09B0023-06 [ICS]; C09B0023-10 [ICS]; C09B0023-14 [ICS]; G03C0001-72 [ICS]; C08F0002-50 [ICS]; C08F0002-46 [ICS,C*]; G03C0001-68 [ICS]
BE 788295	IPCR ECLA IPCI	C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24 [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A]; C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00 [I,C*]; C08F0002-00 [I,A]; C08F0002-46 [I,C*]; C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50 [I,A]; C09B0023-00 [I,C*]; C09B0023-01 [I,A]; C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675 [I,C*]; G03C0001-675 [I,A]; G03C0001-72 [I,C*]; G03C0001-72 [I,A]; G03F0007-004 [I,C*]; G03F0007-029 [I,A] C08F002/46+IDT; C09B023/00S; C09B023/06; C09B023/14; C09B023/14H; G03C0001/675; G03F007/029A C07D [ICM]
DE 2243621	IPCI IPCR	C07D0055-12 [ICM] C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24 [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A]; C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00 [I,C*]; C08F0002-00 [I,A]; C08F0002-46 [I,C*]; C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50

	ECLA	[I,A]; C09B0023-00 [I,C*]; C09B0023-01 [I,A]; C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675 [I,C*]; G03C0001-675 [I,A]; G03C0001-72 [I,C*]; G03C0001-72 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-029 [I,C*]; G03F0007-029 [I,A] C08F002/46+IDT; C09B023/00S; C09B023/06; C09B023/14; C09B023/14H; G03C001/675; G03F007/029A
FR 2152039	IPCI	C07D0055-00 [ICM]; C07D0099-00 [ICS]; C08F0029-00
	IPCR	[ICS]; G03C0007-00 [ICS] C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24 [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A]; C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00 [I,C*]; C08F0002-00 [I,A]; C08F0002-46 [I,C*]; C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50 [I,A]; C09B0023-00 [I,C*]; C09B0023-01 [I,A]; C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675 [I,C*]; G03C0001-675 [I,A]; G03C0001-72 [I,C*]; G03C0001-72 [I,A]; G03F0007-004 [I,C*]; G03F0007-004 [I,A]; G03F0007-029 [I,C*]; G03F0007-029 [I,A]
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BR 7206066 [ICS]	IPCI	C09B023/14H; G03C001/675; G03F007/029A C08G0049-00 [ICM]; G03C0001-70 [ICS]; G03C0001-78
	IPCR	C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24 [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A]; C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00 [I,C*]; C08F0002-46 [I,C*]; C08F0002-46 [I,C*]; C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50 [I,A]; C09B0023-00 [I,C*]; C09B0023-01 [I,A]; C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675 [I,C*]; G03C0001-675 [I,A]; G03C0001-72 [I,C*]; G03C0001-72 [I,A]; G03F0007-004 [I,A]; G03F0007-004 [I,A]; G03F0007-029 [I,A]
СН 576967	IPCI	C07D0251-22 [ICM]; C07D0251-24 [ICS]; C07D0251-00 [ICS,C*]; C08F0004-00 [ICS]; C08F0002-48 [ICS]; C08F0002-46 [ICS,C*]
	IPCR	C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24 [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A]; C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00 [I,C*]; C08F0002-46 [I,C*]; C08F0002-46 [I,C*]; C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50 [I,A]; C09B0023-00 [I,C*]; C09B0023-01 [I,A]; C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675 [I,C*]; G03C0001-675 [I,C*]; G03C0001-72 [I,C*]; G03F0007-004 [I,A]; G03F0007-029 [I,A]
	ECLA	C08F002/46+IDT; C09B023/00S; C09B023/06; C09B023/14; C09B023/14H; G03C001/675; G03F007/029A
JP 48036281	IPCI IPCR	C07D0055-12 C08F0002-46 [I,A]; C08F0002-46 [I,C*]; C09B0023-00 [I,C*]; C09B0023-01 [I,A]; C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675 [I,A]; G03C0001-675
	ECLA	[I,C*]; G03F0007-029 [I,A]; G03F0007-029 [I,C*] C08F002/46+IDT; C09B023/00S; C09B023/06; C09B023/14;

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C09B023/14H; G03C001/675; G03F007/029A
 IT 965195
                 IPCI
                        B01J [ICM]
                 IPCR
                        C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24
                        [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A];
                        C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00
                        [I,C*]; C08F0002-00 [I,A]; C08F0002-46 [I,C*];
                        C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50
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                        C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675
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                        G03C0001-72 [I,A]; G03F0007-004 [I,C*]; G03F0007-004
                        [I,A]; G03F0007-029 [I,C*]; G03F0007-029 [I,A]
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                        C08F002/46+IDT; C09B023/00S; C09B023/06; C09B023/14;
                        C09B023/14H; G03C001/675; G03F007/029A
                        G03C0001-76 [ICM]; G03C0001-94 [ICS]; G03C0001-68
 US 3954475
                 IPCI
                        [ICS]; G03C0001-00 [ICS]
                        C08F0002-46 [I,C*]; C08F0002-46 [I,A]; G03C0001-675
                 TPCR
                        [I,C*]; G03C0001-675 [I,A]; G03F0007-029 [I,C*];
                        G03F0007-029 [I,A]
                        430/281.100; 430/916.000; 430/920.000; 430/922.000;
                 NCL
                        522/063.000; 544/176.000; 544/386.000; 546/226.000
                 ECLA
                        C08F002/46+IDT; G03C001/675; G03F007/029A
 JP 56085746
                 IPCI
                        G03C0001-68 [ICM]; G03C0001-727 [ICS]; G03F0007-02
                        [ICS]; G03F0007-10 [ICS]; C08F0002-48 [ICA];
                        C08F0002-46 [ICA,C*]
                 IPCR
                        C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24
                        [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A];
                        C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00
                        [I,C*]; C08F0002-00 [I,A]; C08F0002-46 [I,C*];
                        C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50
                        [I,A]; C09B0023-00 [I,C*]; C09B0023-01 [I,A];
                        C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675
                        [I,C*]; G03C0001-675 [I,A]; G03C0001-72 [I,C*];
                        G03C0001-72 [I,A]; G03F0007-004 [I,C*]; G03F0007-004
                        [I,A]; G03F0007-029 [I,C*]; G03F0007-029 [I,A]
                 ECLA
                        C08F002/46+IDT; C09B023/00S; C09B023/06; C09B023/14;
                        C09B023/14H; G03C001/675; G03F007/029A
    A chromophore-containing vinylhalomethyl-s-triazine capable of
generating a
     free radical upon irradiation to near UV or visible light (330-700 \text{ m}\mu)
is
    used as a photoinitiator in free-radical photoimaging compns. Thus, a
     solution prepared from a poly(vinyl butyral) (Butavar B-72A, Monsanto
Co.) 5,
     trimethylol propane trimethacrylate 3,
     2,4-bis(trichloromethyl)-6-p-methoxystyryl-s-triazine 0.02 and
     dichloroethylene 100 parts was coated as a 2-mil layer on a polyester
     film, dried, laminated to another polyester film, exposed for 10 s to a
     I-W lamp through a photog. step wedge, the films were peeled apart and
     dusted with a toner powder to produce a pos. image corresponding to 4
     steps on the wedge.
ST
     chromophore contg vinylhalomethyltriazine photoinitiator; triazine
     vinylhalomethyl photoinitiator photopolymer imaging
ΙT
    Vinyl acetal polymers
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RL: USES (Uses)
        (butyrals, photopolymerizable compns. containing
chromophore-containing
       vinylhalomethyltriazine photoinitiator and, for photoimaging process)
ΙT
    Vinyl acetal polymers
    RL: USES (Uses)
        (formals, photopolymerizable compns. containing chromophore-containing
       vinylhalomethyltriazine photoinitiator and, for photoimaging process)
ΙT
    Photoimaging compositions and processes
        (free-radical, photosensitive polymeric compns. containing
       chromophore-containing vinylhalomethyltriazine photoinitiators as)
    62579-98-0
ΙT
    RL: USES (Uses)
        (color former, for photoimaging composition containing
       bis(trichloromethyl)methoxystyryltriazine photoinitiator, for magenta
        color image production)
                                         42880-05-7 42880-07-9
     42573-57-9 42880-03-5 42880-04-6
ΤТ
                42880-09-1 42880-10-4 42880-11-5 42880-12-6
    42880-08-0
                42880-14-8 42880-15-9
     42880-13-7
    RL: USES (Uses)
        (photoinitiator, for free-radical photosensitive compns. for photog.
        image production)
    25085-82-9 35838-12-1
ΤT
    RL: USES (Uses)
        (photopolymerizable compns. containing chromophore-containing
       vinylhalomethyltriazine photoinitiator and, for photog. image
       formation)
             THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)
OSC.G
       21
UPOS.G Date last citing reference entered STN: 24 Feb 2010
OS.G CAPLUS 2008:1455183; 2005:1175707; 2006:185151; 1992:663027;
             2007:376490; 2006:605131; 2004:293287; 2004:293280; 2004:293278;
             2003:852844; 2003:796171; 2003:796061; 1999:635413; 1998:667955;
             1997:805554; 1995:958474; 1986:226679; 1985:15163; 1984:456250;
             1984:69316; 1983:613811
L6
    ANSWER 17 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1977:36343 CAPLUS <<LOGINID::20100303>>
DN 86:36343
OREF 86:5725a,5728a
ED Entered STN: 12 May 1984
TI Photosensitive elements containing chromophore-substituted
    vinyl-halomethyl-s-triazines
   Bonham, James A.; Petrellis, Panayotis C.
IN
   Minnesota Mining and Manufacturing Co., USA
PΑ
   U.S., 9 pp.
SO
    CODEN: USXXAM
DT Patent
LA
   English
    G03C001-76
IC
INCL 096067000
    74-5 (Radiation Chemistry, Photochemistry, and Photographic Processes)
FAN.CNT 3
    PATENT NO.
                       KIND DATE
                                         APPLICATION NO.
                                                                DATE
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## 10580065

	954475 987037	A A	19760504 19761019		1973-395419 1971-177851			
PRAI US 19 CLASS	971-177851	А3	19710903					
PATENT NO. CLASS		PATENT FAMILY CLASSIFICATION CODES						
US 39544	75 IC INCL	G03C001	- · -					
	IPCI	G03C0001-76 [ICM]; G03C0001-94 [ICS]; G03C0001-68 [ICS]; G03C0001-00 [ICS] C08F0002-46 [I,C*]; C08F0002-46 [I,A]; G03C0001-675 [I,C*]; G03C0001-675 [I,A]; G03F0007-029 [I,C*]; G03F0007-029 [I,A] 430/281.100; 430/916.000; 430/920.000; 430/922.000; 522/063.000; 544/176.000; 544/386.000; 546/226.000						
	IPCR							
	NCL							
ECLA		C08F002	2/46+IDT; G03	BC001	/675; G03F007/0	29A		
US 398703	- ·				0251-00 [ICM,C*	-		
	IPCR		- , - ,		0251-00 [I,C*];			
					*]; C07D0403-06			
					D0413-06 [I,A];			
					A]; C08F0002-46			
			- , - ,		0002-48 [I,A];			
					*]; C09B0023-01 0023-14 [I,A];			
					.Al: G03C0001-7			
		. , ,			0007-004 [I,C*]	. , ,		
					C*1; G03F0007-0	-		
	NCL	- , -,		- ,	0; 430/281.100;	- , -		
			•		0; 522/109.000;			
					0; 544/212.000;			
	ECLA				/00S; C09B023/0	,		
		C09B023	3/14H; G03C00	1/67	5; G03F007/029A			

GΙ

R3C (CH=CH) 
$$_{n}$$
R2

N
N
CH
 $_{R1}$ 
I
R
 $_{R3}$ 
I
R
 $_{R3}$ 
II

AB A chromophore-substituted (halomethyl) vinyl s-triazine derivative I (R = Br,  $\alpha$ 

Cl; R1 = CR3, NH2, NHR4, NR42, OR4 where R4 = Ph, alkyl; R2 = substituted aromatic, heterocyclic group, II where R3 = H, lower alkyl, Ph and Z = O, S;n

= 1-3) generates free radicals upon irradiation with actinic radiation (330-700 nm) and is used as a photoinitiator for a photopolymerizable

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composition for printing plates, relief photog. images and photoresists.
 Thus,
     a photopolymerizable composition composed of a poly(vinylformal) (Formvar
     15-95S, Monsanto Co.) 7.38, maleic anhydride-vinyl anhydride-vinyl
     acetate-vinyl chloride polymer 2.46, trimethylolpropane trimethacrylate
6,
     tris(hydroxyethyl)isocyanurate trimethacrylate 2, Cyan XR-553758 (a
     phthalocyanine pigment from American Cyanamid) 1.22 and
     2,4-bis(trichloromethyl)-6-p-methoxystyryl-s-triazine 0.4 was coated on
an
     anodized Al plate at 200 mg/ft2, dried at 140° F for 2 min, exposed
     through a step wedge to a C arc, and developed by treating with a
solution
     containing PrOH 35, H2O 62, (NH4)2SO3 1.5 and (NH4)H2PO4 1.5% and
rubbing with
     a pad to remove the nonexposed areas to give 11 steps vs. 1 step for a
     control using benzoin methyl ether as the photoinitiator.
ST
     photopolymerizable compn halomethylvinyltriazine initiator; image relief
    photog photopolymerizable compn
ΙT
     Vinyl acetal polymers
     RL: USES (Uses)
        (formals, photopolymerizable compns. containing, for photog. images
and
        printing plates)
ΙT
     Printing plates
        (photopolymerizable compns. for, containing (halomethyl) vinyltriazine
        photoinitiators)
ΙT
     Photoimaging compositions and processes
        (photopolymerzable compns. containing (halomethyl) vinyl triazine
        photoinitiators for)
ΙT
     Resists
        (photo-, photopolymerizable compns. containing (halomethyl) vinyl
triazine
        photoinitiators for)
     42573-57-9
ΙT
     RL: USES (Uses)
        (photopolymerizable composition containing, for printing plates and
        photoresists)
ΙT
     3290-92-4
                 9003-22-9
                             35838-12-1
     RL: USES (Uses)
        (photopolymerizable compns. containing ( halomethyl) vinyltriazine
        photoinitiator and, for photog. images and printing plates)
                                 42880-05-7P
ΤТ
     42880-03-5P
                   42880-04-6P
                                               42880-07-9P
                   42880-09-1P
     42880-08-0P
                                 42880-11-5P
                                                42880-12-6P
                                                              42880-13-7P
     42880-14-8P
                   42880-15-9P
                                 61413-27-2P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
OSC.G
              THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
UPOS.G Date last citing reference entered STN: 12 Mar 2009
OS.G
      CAPLUS 1992:663027; 2004:293287; 2004:293280; 2004:293278; 2003:696378;
              2003:1277; 1999:90242; 1995:958474; 1993:678838; 1989:125483;
              1986:99530; 1985:15163; 1983:613811; 1982:627544; 1982:190687
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ANSWER 18 OF 18 CAPLUS COPYRIGHT 2010 ACS on STN

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1973:516093 CAPLUS <<LOGINID::20100303>>
ΑN
DN
    79:116093
OREF 79:18859a,18862a
   Entered STN: 12 May 1984
ΤI
    Chromophore-substituted vinylhalomethyl-s-triazine
IN
   Bonham, James A.; Petrellis, Panayotis C.
   Minnesota Mining and Manufacturing Co.
PA
   Ger. Offen., 23 pp.
    CODEN: GWXXBX
DT
   Patent
LA
   German
IC
    C07D; G03C
CC
    36-6 (Plastics Manufacture and Processing)
    Section cross-reference(s): 28, 74
FAN.CNT 3
    PATENT NO.
                      KIND DATE
                                         APPLICATION NO.
                                                                DATE
                              _____
                       ____
                                          _____
                        A1
PΤ
    DE 2243621
                              19730308 DE 1972-2243621
                                                                19720901
                      C2
A
A
                              19870820
    DE 2243621
                              19761019
    US 3987037
                                         US 1971-177851
                                                                19710903
PRAI US 1971-177851
                              19710903
CLASS
PATENT NO.
              CLASS PATENT FAMILY CLASSIFICATION CODES
DE 2243621
                IC
                      C07D; G03C
                IPCI
                      C07D0055-12 [ICM]
                IPCR
                      C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24
                       [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A];
                       C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00
                       [I,C*]; C08F0002-00 [I,A]; C08F0002-46 [I,C*];
                       C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50
                       [I,A]; C09B0023-00 [I,C*]; C09B0023-01 [I,A];
                       C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675
                       [I,C*]; G03C0001-675 [I,A]; G03C0001-72 [I,C*];
                       G03C0001-72 [I,A]; G03F0007-004 [I,C*]; G03F0007-004
                       [I,A]; G03F0007-029 [I,C*]; G03F0007-029 [I,A]
                ECLA
                      C08F002/46+IDT; C09B023/00S; C09B023/06; C09B023/14;
                       C09B023/14H; G03C001/675; G03F007/029A
US 3987037
                IPCI
                       C07D0251-24 [ICM]; C07D0251-00 [ICM,C*]
                IPCR
                       C07D0251-22 [I,A]; C07D0251-00 [I,C*]; C07D0251-24
                       [I,A]; C07D0403-00 [I,C*]; C07D0403-06 [I,A];
                       C07D0413-00 [I,C*]; C07D0413-06 [I,A]; C08F0002-00
                       [I,C*]; C08F0002-00 [I,A]; C08F0002-46 [I,C*];
                       C08F0002-46 [I,A]; C08F0002-48 [I,A]; C08F0002-50
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                       C09B0023-06 [I,A]; C09B0023-14 [I,A]; G03C0001-675
                       [I,C*]; G03C0001-675 [I,A]; G03C0001-72 [I,C*];
                       G03C0001-72 [I,A]; G03F0007-004 [I,C*]; G03F0007-004
                       [I,A]; G03F0007-029 [I,C*]; G03F0007-029 [I,A]
                NCL
                       544/216.000; 101/453.000; 430/281.100; 430/343.000;
                       430/920.000; 522/063.000; 522/109.000; 522/121.000;
                       544/194.000; 544/211.000; 544/212.000; 544/219.000
                      C08F002/46+IDT; C09B023/00S; C09B023/06; C09B023/14;
                ECLA
                       C09B023/14H; G03C001/675; G03F007/029A
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A title compound (I) where R is Cl3C or H2N, R1 is Ph, substituted
AB
phenyl,
     or a heterocyclic radical, and n is 1-3), useful as photoinitiators in
the
    manufacture of printing plates and light-sensitive elements for photo
    duplication systems, were prepared by condensing the appropriate
s-triazine
    derivative with aldehydes or salts of aldehyde derivative Thus, a
mixture of 330
    parts 2,4-bis(trichloromethyl)-6-methyl-s-triazine [949-42-8] and 149.6
    parts p-anisaldehyde [123-11-5] in 1 l. toluene containing 45 parts
    piperidinium acetate was refluxed while distilling water to give
     2,4-bis(trichloromethyl)-6-p-methoxystyryl-s-triazine (II) [42573-57-9].
     The performance of a printing plate prepared by coating an anodized Al
plate
     with a resin composition containing II was superior to similar plates
prepared with
     resin composition containing conventional photo initiators.
     chromophore contg triazine deriv; photoinitiator triazine deriv; photog
     sensitizer triazine deriv; printing plate light sensitizer;
     photoduplication light sensitizer
ΙT
     Photographic sensitizers
        (chromaphore-containing triazine derivs.)
TΤ
    Printing plates
        (light sensitizers for manufacture of, chromaphore-containing
triazine derivs.
        as)
ΤТ
    Photoduplication
        (light sensitizers for, chromaphore-containing triazine derivs.)
     Light, chemical and physical effects
TT
        (sensitizers, chromaphore-containing triazine derivs.)
                42880-04-6
                             42880-05-7 42880-06-8
                                                        42880-07-9
IT
     42880-03-5
     42880-08-0
                 42880-09-1
                               42880-10-4
                                            42880-11-5
                                                         42880-12-6
     42880-13-7
                 42880-14-8
                               42880-15-9
     RL: USES (Uses)
        (light sensitizers, for photoduplication and printing plate
manufacture)
ΙT
     949-42-8
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with aldehydes)
ΙT
    123-11-5
                6203-18-5
                           42880-17-1
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with triazine derivs.)
=> D HIS
     (FILE 'HOME' ENTERED AT 15:55:01 ON 03 MAR 2010)
     FILE 'REGISTRY' ENTERED AT 15:55:15 ON 03 MAR 2010
            246 S TRIAZINE AND ETHENYL AND TRICHLORO
L1
L2
             12 S L1 AND ETHOXY
L3
              2 S L1 AND DIETHOXY
L4
             24 S L1 AND DI AND OXY
```

L5 1 S 42880-07-9

FILE 'CAPLUS' ENTERED AT 15:59:06 ON 03 MAR 2010

L6 18 S L5

=> LOG Y

SINCE FILE TOTAL ENTRY SESSION 63.32 163.78 COST IN U.S. DOLLARS FULL ESTIMATED COST

SINCE FILE TOTAL
ENTRY SESSION
-15.30 -15.30 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

STN INTERNATIONAL LOGOFF AT 15:59:34 ON 03 MAR 2010